PRODUCT ENVIRONMENTAL PROFILE



theMura S180-100 UP WH

Holder of the declaration

Theben AG:

Hohenbergstraße 32
72401 Haigerloch
Germany
https://www.theben.de

PEP directed by
Qweeko
hello@qweeko.io

References covered

2060650 ;2060653 ;2060655 ;2060658 ;206066 ;2060670;
2060680 ;2060681 ;2060682 ;2060683 ;2060684 ;2060685;
2060686 ;2060687 ;2060750 ;2060755 ;2060760 ;2060770;
2060804 ;2060805 ;2060806 ;2069650 ;2069651 ;2069652;
2069655 ;2069656 ;2069657 ;2069658 ;2069680 ;2069681;
2069682 ;2069683

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

Reference product

Identification of the reference product:
2060650

Product category (PSR) :
Family: Electrical switchgear and control gear solutions
Sub-family: Other Equipment

Functional unit

Detect a 170 ° presence to switch on the lights, for 10 years

Declared unit

Detect a 170 ° presence to switch on the lights, for 10 years

UD = UF

Technical characteristics

Product lifespan	10 year(s)
Active mode duration (% of lifespan)	20%
Standby mode duration (% of lifespan)	80%
Detector detection angle	170°
Detector power in active mode	0.4 W
Detector power in standby mode	0.4 W
Detector function	Light switch

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 0.1029 kg. The mass of the product packaging is 0.0556kg.
The constituent materials are:

Plastics	g	%	Metals	g	%	Others	g	%
PC	39.9	25.16	Steel	21.65	13.65	Cardboard	0.045	28.37
Nylon	4.2	2.65	Copper	3.97	2.5	Electronic components	0.03	18.92
HDPE	2.1	1.32	Tin	0.015	<0.1	Paper	0.011	6.94
PE	0.71	0.45						
Others	0.05	<0.1						
Total	46.96	29.61	**Total**	25.64	16.15	**Total**	86	54.22
Total mass of the reference product : 0.159 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 China. The following were taken into consideration: raw materials, transport to the production site, manufacture of components and parts, assembly, packaging, and packaging of raw materials (5% of the mass of the reference equipment (equipment + packaging) and the treatment of waste generated.
Distribution	Distribution for the Europe
Installation	In this step, the following were taken into consideration: Transportation and disposal of product packaging, in accordance with the scenarios specified in PSR-0005-ed3.1-EN-2023 12 08 (Active Product).
Use	In this phase, the following was taken into consideration: Total electricity consumption (B6 module). (puissance_active * temps_actif/100 + puissance_veille * temps_veille/100) * dvr * nb_heure/1000 = (0.4 * 20.0/100 + 0.4 * 80.0/100) * 10.0 * 8766.0/1000 = 35.064 kwh
End of life	The end-of-life scenarios for this product were calculated using the Ecosystem database.

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 and the Ecosystem database.

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)
China	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 170 ° presence to switch on the lights, 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	6.01E+00	1.05E-01	2.55E-02	1.29E+01	1.97E-01	1.92E+01	-9.00E-02
Environment: Global warming potential (fossil) | GWPF	kg CO2 eq	5.95E+00	1.05E-01	6.54E-03	1.24E+01	1.97E-01	1.87E+01	-1.01E-01
Environment: Global warming potential (biogenic) | GWPB	kg CO2 eq	5.30E-02	9.14E-05	1.89E-02	4.26E-01	9.67E-06	4.98E-01	1.05E-02
Environment: Global warming potential (land use) | GWPL	kg CO2 eq	1.19E-02	5.07E-05	6.34E-06	3.10E-02	0	4.29E-02	0
Environment: Ozone depletion potential | ODP	kg CFC-11 eq	1.73E-07	2.27E-09	8.06E-11	2.36E-07	1.18E-08	4.23E-07	-6.42E-09
Environment: Acidification potential | AP	mol H+ eq	9.29E-02	3.41E-04	4.91E-05	7.12E-02	1.84E-03	1.66E-01	-5.69E-03
Environment: Eutrophication potential (freshwater) | EPF	kg P eq	7.65E-03	7.31E-06	5.84E-07	1.17E-02	3.35E-09	1.94E-02	5.12E-26
Environment: Eutrophication potential (marine) | EPM	kg N eq	9.59E-03	1.17E-04	2.83E-05	1.15E-02	1.33E-06	2.12E-02	-7.34E-06
Environment: Eutrophication potential (terrestrial) | EPT	mol N eq	1.09E-01	1.24E-03	1.96E-04	1.04E-01	1.80E-04	2.15E-01	-1.07E-03
Environment: Photochemical ozone creation potential | POCP	kg NMVOC eq	3.51E-02	5.09E-04	7.49E-05	3.34E-02	1.43E-04	6.93E-02	-4.99E-04
Environment: Abiotic depletion potential (elements) | ADPE	kg Sb eq	1.68E-03	3.43E-07	1.96E-08	1.51E-04	1.23E-09	1.83E-03	-3.71E-05
Environment: Abiotic depletion potential (fossils) | ADPF	MJ (net calorific)	7.95E+01	1.49E+00	6.59E-02	2.87E+02	0	3.68E+02	0
Environment: Water deprivation potential | WDP	m3 world eq	2.42E+00	7.32E-03	6.29E-04	7.13E+00	0	9.56E+00	0

*The detailed results of the module B can be found in the tables located at this 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	4.51E-07	8.32E-09	5.91E-09	2.61E-07	6.92E-09	7.33E-07	-1.42E-08
Environment: Ionising radiation (human health) | IRH	kBq U235 eq	6.63E-01	1.98E-03	1.01E-04	7.95E+00	5.98E-03	8.63E+00	-2.55E-03
Environment: Ecotoxicity potential (freshwater) | ETPF	CTUe	1.44E+02	7.31E-01	8.15E-02	4.74E+01	3.36E-01	1.92E+02	-9.75E-01
Environment: Human toxicity (carcinogenic) | HTC	CTUh	1.10E-08	4.76E-11	1.08E-10	6.20E-09	1.17E-10	1.75E-08	-7.17E-10
Environment: Human toxicity (non-carcinogenic) | HTNC	CTUh	5.86E-07	1.05E-09	2.23E-10	2.49E-07	1.38E-08	8.50E-07	-5.84E-08
Environment: Land use and land use change | LULUC	dimensionless	4.56E+01	8.82E-01	3.41E-02	5.49E+01	8.35E-02	1.02E+02	-4.96E-01

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

Resource utilisation indicators

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Primary energy: Renewable (energy use) | PERE	MJ (PERE)	1.13E+01	2.30E-02	1.62E-03	6.33E+01	0	7.46E+01	0
Primary energy: Renewable (material use) | PERM	MJ (PERM)	0.00E+00	0	0	0.00E+00	0	0.00E+00	0
Primary energy: Renewable (total) | PERT	MJ (PERT)	1.13E+01	2.30E-02	1.62E-03	6.33E+01	0	7.46E+01	0
Primary energy: Non-renewable (energy use) | PENRE	MJ (PENRE)	7.70E+01	1.36E+00	6.07E-02	2.83E+02	2.89E-01	3.62E+02	-7.52E-02
Primary energy: Non-renewable (material use) | PENRM	MJ (PENRM)	2.47E+00	1.30E-01	5.24E-03	4.12E+00	0	6.73E+00	0
Primary energy: Non-renewable (total) | PENRT	MJ (PENRT)	7.95E+01	1.49E+00	6.59E-02	2.87E+02	2.89E-01	3.69E+02	-7.52E-02
Resource: Secondary materials | SM	kg (SM)	2.53E-01	1.62E-03	4.67E-02	3.70E+00	0	4.00E+00	0

Indicators	Unit	A1-A3	A4	A5	B1-B7*	C1-C4	Total (excluding D)	D
Resource: Renewable secondary fuels | RSF	MJ (RSF)	7.22E-02	4.36E-04	1.20E-05	2.15E+00	0	2.22E+00	0
Resource: Non-renewable secondary fuels | NRSF	MJ (NRSF)	2.16E-01	8.57E-04	4.44E-05	2.13E+00	0	2.35E+00	0
Resource: Net use of fresh water | FW	m3 (FW)	5.61E-02	1.78E-04	1.30E-05	2.28E-01	9.16E-01	1.20E+00	-1.23E+00

*The detailed results of module B can be found in the tables located at this 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)	4.28E-01	1.38E-03	1.51E-04	2.81E-01	-3.46E-01	1,06E+00	2.07E-02
Non-hazardous waste disposed | NHWD	kg (NHWD)	3.70E-01	7.11E-02	4.73E-03	8.73E-01	-3.47E-01	1,67E+00	2.15E-02
Radioactive waste disposed | RWD	kg (RWD)	1.64E-04	4.81E-07	2.50E-08	2.04E-03	-7.58E-06	2,21E-03	2.60E-06

*The detailed results of the module B can be found in the tables located at this 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)	4.73E-01	1.46E-03	6.67E-05	3.59E+00	0	4.07E+00	0
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 this 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	1.89E-02

Indicators calculated based on the following values :

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

Detailed 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	1.29E+01	0	1.29E+01
Environment: Global warming potential (fossil) | GWPF	kg CO2 eq	0	0	0	0	0	1.24E+01	0	1.24E+01
Environment: Global warming potential (biogenic) | GWPB	kg CO2 eq	0	0	0	0	0	4.26E-01	0	4.26E-01
Environment: Global warming potential (land use) | GWPL	kg CO2 eq	0	0	0	0	0	3.10E-02	0	3.10E-02
Environment: Ozone depletion potential | ODP	kg CFC-11 eq	0	0	0	0	0	2.36E-07	0	2.36E-07
Environment: Acidification potential | AP	mol H+ eq	0	0	0	0	0	7.12E-02	0	7.12E-02
Environment: Eutrophication potential (freshwater) | EPF	kg P eq	0	0	0	0	0	1.17E-02	0	1.17E-02
Environment: Eutrophication potential (marine) | EPM	kg N eq	0	0	0	0	0	1.15E-02	0	1.15E-02
Environment: Eutrophication potential (terrestrial) | EPT	mol N eq	0	0	0	0	0	1.04E-01	0	1.04E-01
Environment: Photochemical ozone creation potential | POCP	kg NMVOC eq	0	0	0	0	0	3.34E-02	0	3.34E-02
Environment: Abiotic depletion potential (elements) | ADPE	kg Sb eq	0	0	0	0	0	1.51E-04	0	1.51E-04
Environment: Abiotic depletion potential (fossils) | ADPF	MJ (net calorific)	0	0	0	0	0	2.87E+02	0	2.87E+02
Environment: Water deprivation potential | WDP	m3 world eq	0	0	0	0	0	7.13E+00	0	7.13E+00
Environment: Particulate matter formation | PMF	disease incidence	0	0	0	0	0	2.61E-07	0	2.61E-07
Environment: Ionising radiation (human health) | IRH	kBq U235 eq	0	0	0	0	0	7.95E+00	0	7.95E+00
Environment: Ecotoxicity potential (freshwater) | ETPF	CTUe	0	0	0	0	0	4.74E+01	0	4.74E+01
Environment: Human toxicity (carcinogenic) | HTC	CTUh	0	0	0	0	0	6.20E-09	0	6.20E-09
Environment: Human toxicity (non-carcinogenic) | HTNC	CTUh	0	0	0	0	0	2.49E-07	0	2.49E-07
Environment: Land use and land use change | LULUC	dimensionless	0	0	0	0	0	5.49E+01	0	5.49E+01

Indicators	Unit	B1	B2	B3	B4	B5	B6	B7	Total module B
Primary energy: Renewable (energy use) | PERE	MJ (PERE)	0	0	0	0	0	6.33E+01	0	6.33E+01
Primary energy: Renewable (material use) | PERM	MJ (PERM)	0	0	0	0	0	0.00E+00	0	0.00E+00
Primary energy: Renewable (total) | PERT	MJ (PERT)	0	0	0	0	0	6.33E+01	0	6.33E+01
Primary energy: Non-renewable (energy use) | PENRE	MJ (PENRE)	0	0	0	0	0	2.83E+02	0	2.83E+02
Primary energy: Non-renewable (material use) | PENRM	MJ (PENRM)	0	0	0	0	0	4.12E+00	0	4.12E+00
Primary energy: Non-renewable (total) | PENRT	MJ (PENRT)	0	0	0	0	0	2.87E+02	0	2.87E+02
Resource: Secondary materials | SM	kg (SM)	0	0	0	0	0	3.70E+00	0	3.70E+00
Resource: Renewable secondary fuels | RSF	MJ (RSF)	0	0	0	0	0	2.15E+00	0	2.15E+00
Resource: Non-renewable secondary fuels | NRSF	MJ (NRSF)	0	0	0	0	0	2.13E+00	0	2.13E+00
Resource: Net use of fresh water | FW	m3 (FW)	0	0	0	0	0	2.28E-01	0	2.28E-01
Hazardous waste disposed | HWD	kg (HWD)	0	0	0	0	0	2.81E-01	0	2.81E-01
Non-hazardous waste disposed | NHWD	kg (NHWD)	0	0	0	0	0	8.73E-01	0	8.73E-01
Radioactive waste disposed | RWD	kg (RWD)	0	0	0	0	0	2.04E-03	0	2.04E-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	3.59E+00	0	3.59E+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

Homogeneous environmental family and extrapolated factors

Covered references

	Product designation	Commercial reference
MURA	theMura S180-100 UP WH	2060650
	theMura S180-100 UP N WH	2060653
	theMura S180-101 UP WH	2060655
	theMura S180-101 2.20 UP WH	2060658
	theMura S180 Slave UP WH	2060660
	theMura S180-100 2W UP WH	2060670
	theMura S180-100 UP FED BK	2060680
	theMura S180-100 EB CH BK	2060681
	theMura S180-101 UP FED BK	2060682
	theMura S180-101 EB CH BK	2060683
	theMura S180 Slave UP FED BK	2060684
	theMura S180 Slave EB CH BK	2060685
	theMura S180-100 2W UP FED BK	2060686
	theMura S180-100 2W EB CH BK	2060687
	theMura S180-100 B UP	2060750
	theMura S180-101 B UP	2060755
	theMura S180 Slave B UP	2060760
	theMura S180-100 2W B UP	2060770
	theMura S180-100 GIST	2060804
	theMura S180-100 B UP	2060805
	theMura S180 Slave UP	2060806
	theMura S180 KNX UP WH	2069650
	theMura S180 KNX UP FED WH	2069651
	theMura S180 KNX EB WH	2069652
	theMura P180 KNX UP WH	2069655
	theMura P180 KNX UP FED WH	2069656
	theMura P180 KNX EB WH	2069657
	theMura P180 2.20 KNX UP WH	2069658
	theMura S180 KNX UP FED BK	2069680
	theMura S180 KNX EB CH BK	2069681
	theMura P180 KNX UP FED BK	2069682
	theMura P180 KNX EB CH BK	2069683

Extrapolated factors for the homogeneous family

To calculate the environmental impacts at the level of the declared unit of the products covered by this EPP, 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, distribution, end-of-life phases, and Module D: based on the weight of the products and packaging
- Use phase: B6: Ratio of consumption of the covered product to the reference product

Characteristics of the references covered

Reference	Product weight (g)	Packaging weight (g)	Energy consumption standby (W)	Energy consumption operating (W)	Duration operating (%)	Duration standby (%)
Reference product						
2060650	110	45	0.4	0.4	20	80
Covered products						
2060650	93	45	0.4	0.4	20	80
2060653	116	44	0.4	0.4	20	80
2060655	119	45	0.4	0.4	20	80
2060658	88.5	46.5	0.4	0.4	20	80
2060660	90	47.5	0.4	0.4	20	80
2060670	110	45	0.4	0.4	20	80
2060680	110	45	0.4	0.4	20	80
2060681	110	45	0.4	0.4	20	80
2060682	110	45	0.4	0.4	20	80
2060683	90	47.5	0.4	0.4	20	80
2060684	90	47.5	0.4	0.4	20	80
2060685	110	45	0.4	0.4	20	80
2060686	110	45	0.4	0.4	20	80
2060687	95	50	0.4	0.4	20	80
2060750	99	50	0.4	0.4	20	80
2060755	72	50	0.4	0.4	20	80
2060760	75	51	0.4	0.4	20	80
2060770	117	45	0.4	0.4	20	80
2060804	95	45	0.4	0.4	20	80
2060805	72	45	0.4	0.4	20	80
2060806	84	44	0.4	0.4	20	80
2069650	84	44	0.4	0.4	20	80
2069651	84	44	0.4	0.4	20	80
2069652	87	44.5	0.3	0.3	20	80
2069655	93	45	0.4	0.4	20	80
2069656	87	44.5	0.3	0.3	20	80
2069657	87	44.5	0.3	0.3	20	80
2069658	89	44.5	0.3	0.3	20	80
2069680	84	44	0.4	0.4	20	80
2069681	84	44	0.4	0.4	20	80
2069682	87	44.5	0.3	0.3	20	80
2069683	87	44.5	0.3	0.3	20	80

Extrapolation factors for covered references

Reference	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	Use (B1-B7)	End of life (C1-C4)	Module D
Reference product						
2060650	1	1	1	1	1	1
Covered products						
2060650	0.89	0.89	1.00	1.00	0.85	0.85
2060653	1.03	1.03	0.98	1.00	1.05	1.05
2060655	1.06	1.06	1.00	1.00	1.08	1.08
2060658	0.87	0.87	1.03	1.00	0.80	0.80
2060660	0.89	0.89	1.06	1.00	0.82	0.82
2060670	1.00	1.00	1.00	1.00	1.00	1.00
2060680	1.00	1.00	1.00	1.00	1.00	1.00
2060681	1.00	1.00	1.00	1.00	1.00	1.00
2060682	1.00	1.00	1.00	1.00	1.00	1.00
2060683	0.89	0.89	1.06	1.00	0.82	0.82
2060684	0.89	0.89	1.06	1.00	0.82	0.82
2060685	1.00	1.00	1.00	1.00	1.00	1.00
2060686	1.00	1.00	1.00	1.00	1.00	1.00
2060687	0.94	0.94	1.11	1.00	0.86	0.86
2060750	0.96	0.96	1.11	1.00	0.90	0.90
2060755	0.79	0.79	1.11	1.00	0.65	0.65
2060760	0.81	0.81	1.13	1.00	0.68	0.68
2060770	1.05	1.05	1.00	1.00	1.06	1.06
2060804	0.90	0.90	1.00	1.00	0.86	0.86
2060805	0.75	0.75	1.00	1.00	0.65	0.65
2060806	0.83	0.83	0.98	1.00	0.76	0.76
2069650	0.83	0.83	0.98	1.00	0.76	0.76
2069651	0.83	0.83	0.98	1.00	0.76	0.76
2069652	0.85	0.85	1.00	0.75	0.79	0.79
2069655	0.85	0.85	1.00	0.75	0.79	0.79
2069656	0.85	0.85	1.00	0.75	0.79	0.79
2069657	0.86	0.86	1.00	0.75	0.81	0.81
2069658	0.83	0.83	1.00	1.00	0.76	0.76
2069680	0.83	0.83	1.00	1.00	0.76	0.76
2069681	0.85	0.85	1.00	0.75	0.79	0.79
2069682	0.85	0.85	1.00	0.75	0.79	0.79
2069683	0.89	0.89	1.00	1.00	0.85	0.85

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Edition date: 08-2025	Validity period: 5 years

Independent verification of the declaration and data in compliance 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 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	