Product Environmental Profile

Socket-outlets for Simon K45, Simon 500 Cima and Simon Cima ranges

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		Supplemented by	PSR-0005-ed3-EN-2023 06 06
Verifier accreditation number	VH45	Information and reference documents	www.pep-ecopassport.org
Date of issue	October 2024	Validity period	5 years

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)

PEP are complaint with XP CO08-100-1:2016 or EN 50693:2019

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14025:2006 “Environmental labels and declarations. Type III environmental declarations”

Company information

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Product description and homogeneous environmental family

This Product Environmental Profile (PEP) includes socket outlets for Simon K45, Simon 500 Cima and Simon Cima ranges. The PEP includes a group of similar products, which all belong to the same product family. The covered socket outlets have the same main functionality and the same applicable standards: IEC 63000:2018, IEC 60884-1 Ed. 4.0, UNE 20315-1-1:2017 and UNE 20315-1-2:2017.

These socket outlets have a rated current of 16A and a rated voltage of 250V. They can be installed wall-mounted or surface-mounted, and withstands temperatures from -5ºC to 60ºC, making them useful for any type of climate. The differences between the sockets of this homogeneous family fall mainly on the design ranges included: 500 Cima, K45 and Cima. Each design range has a characteristic shape, and all include a pilot light version.

In addition to the variations in shape due to the design, the colour of each product and the type of plug depending on the country of destination also represent variations within the family.

The reference product of the family is **K11/9 socket outlet of K45 range with a quick-connection system and of white colour**. Extrapolation coefficients will be calculated and applied for each stage of the life cycle to calculate the impacts of the other products of the family.

Functional unit

“Connect/disconnect the plug of a load consuming 16 A maximum under a voltage of 250 V while protecting the user from direct contact with live parts in the Household/Commercial application areas, according to the use scenario defined by the PSR, and for the reference service life of the product of 20 years”.

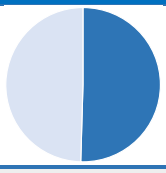
The reference flow is the product itself with its unitary packaging:

- Product with packaging: 45.24 g
- Product without packaging: 39.71 g

The reference lifetime is defined by the corresponding Product Specific Rules for this type of products in 20 years.

Constituent materials

The reference product is mainly made of plastic, metal and glass fibres materials. The packaging of the reference product is made of a cardboard box with cardboard separators and adhesive label.

Material		Weight	Percentage
Plastics 50.51 % 	Polycarbonate	22.79 g	50.37 %
	PTFE	0.07g	0.15 %
Metals 37.07 % 	Brass	10.20 g	22.55 %
	Stainless steel	2.80 g	6.19 %
	Copper-nickel alloy	2.04 g	4.51 %
	Steel	1.73 g	3.82 %
Others 0.19 %	Glass fibre	0.09 g	0.19 %
Packaging 12.22 % 	Cardboard	5.20 g	11.49 %
	Paper	0.33 g	0.73 %
Reference product		39.71 g	87.78 %
Packaging		5.53 g	12.22 %
TOTAL		**45.24 g**	**100 %**

Manufacturing stage

This stage includes the production, industrial transformation, manufacturing processes and transportation of raw materials and components making up the reference product. The components of the product received from suppliers are transformed, assembled, packaged and tested by Simon in their diverse manufacturing plants located in Spain (Olot and Martorelles) and Romania (Sibiu). The generated wastes attributed to the manufacturing of the reference product have also been considered. In addition to these aspects, this stage also includes the transport from the packaging plant to Simon's last logistics platform in Spain, from where the products are distributed to the customers throughout the world.

Distribution stage

The products are directly distributed from Simon's logistics platform to the final customers. The distribution scenario comprises the following destinations:

Destination	Percentage (%)	Type of transport
Spain	64.90 %	Continental transport
Poland	24.04 %	Continental transport
Portugal	2.50 %	Continental transport
France	2.42 %	Continental transport
Sweden	2.01 %	Continental transport
Morocco	1.48 %	Intercontinental transport
Bulgaria	0.96 %	Intracontinental transport
Germany	0.67 %	Continental transport
Russia	0.52 %	Continental transport
Georgia	0.10 %	Continental transport
Italy	0.07 %	Continental transport
Peru	0.07 %	Intercontinental transport
Latvia	0.06 %	Intracontinental transport
Equatorial Guinea	0.06 %	Intercontinental transport
Belgium	0.04 %	Continental transport
Reunion	0.04 %	Intercontinental transport
Estonia	0.04 %	Continental transport
Slovenia	0.01 %	Continental transport
Romania	< 0.00 %	Continental transport
Argelia	< 0.00 %	Intercontinental transport

Installation stage

The Installation stage of the sockets consists of the manual assembly of the reference product by the customer, without energy consumption. The product is packaged without any additional component apart from the socket itself (disposed in the end-of-life stage) and the packaging (disposed in the installation stage). For this reason, no installation waste must be considered in the installation of the product apart from the packaging waste. The scenario for the end-of-life of the packaging components has been determined by the PSR for the distribution scope.

Use stage

The energy consumption due to the loss of energy during the lifetime of the reference product was estimated according to the PEP requirements described in the PSR. The use scenario requirements consider a load rate of 10% of the rated current with a use time rated of 30% over 20 years of reference lifetime. Several laboratory tests have been conducted to estimate the load rate, applying the entire functional unit. The intensity applied has been modified to 10% of the maximum Intensity, according to the PSR specifications. Then, an electric energy formula has been applied, involving the load timing rate of the PSR:

$$P = I^2 * R * LR * UTR * RLT$$

Where: I = Intensity; R = Resistance; LR = Load Rate; UTR = Use Time Rate; RLT = Reference Lifetime

The total energy consumption due to losses of energy during 20 years in these given conditions was 0.404 kWh for the reference product.

This product has no maintenance, as it is completely replaced when it breaks and must be renewed. The product quality is very high, and it can last more than 20 years on the client's house. The products are installed manually. Therefore, no additional electricity consumption is required for maintenance during the 20 years of use.

End of life stage

In the end-of-life stage, the following aspects were considering:

- The transportation of the components to the treatment site. As there is no data available for the end-of-life stage, the PSR indicates to take 1,000 km by lorry into consideration.
- The treatment process of the reference product.

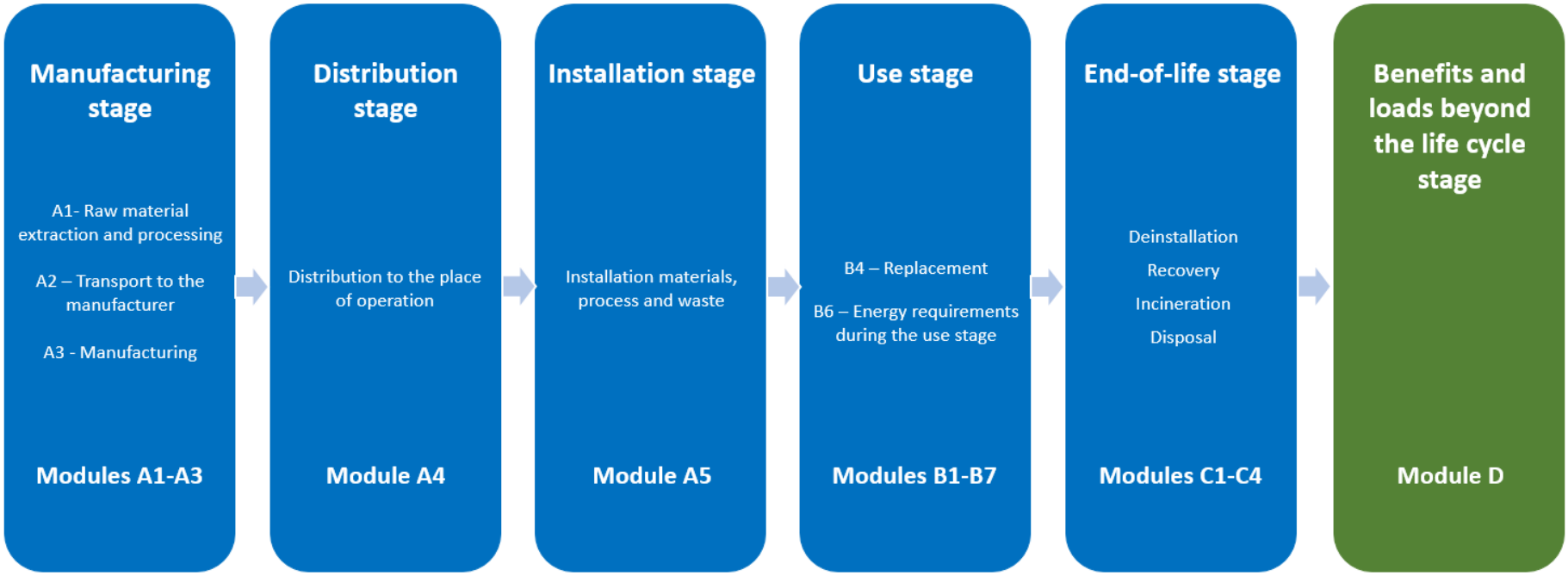
The reference product is covered by the WEEE Directive 2012/19/EU, and therefore its end-of-life is regulated. To reach the main EU objectives on recycling of this kind of products, the waste management of the reference product should be taken care by a producer responsibility organisation.

For the end-of-life of the product, data on the treatment of WEEE in the European Union in 2018 from the Eurostat database has been used to calculate the end-of-life scenario for European scope; while for the rest of the world PSR-default scenario has been used: 50% incineration without energy recovery and 50% landfilling.

Destination	Percentage of sales (%)	End-of-life scenario *		
		Recycling	Incineration	Landfilling
Europe	98.35 %	83.90 %	4.60 %	11.50 %
Rest of the world	1.65 %	00.00 %	50 %	50 %

Environmental impacts

The environmental impacts of the reference product have been evaluated for the five stages described above: manufacturing, distribution, installation, use and end-of-life stages. Additionally, each one of these stages have been divided when required into several modules.



The environmental impact assessment has been carried out with Simapro 9.6.0.1 tool and the background databases have been retrieved from Ecoinvent 3.9 libraries.

Results of mandatory indicators per Functional Unit of the reference product:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)		Distribution stage (module A4)		Installation stage (module A5)		Module B6	Use stage (modules B1-B7)		End-of-life stage (modules C1-C4)		Benefits (module D)
Climate change - Total	kg CO_2 eq	6.89E-01	4.66E-01	67.68%	9.19E-03	1.33%	1.20E-02	1.75%	1.85E-01	1.85E-01	26.91%	1.61E-02	2.34%	-4.96E-02
Climate change – Fossil	kg CO_2 eq	6.84E-01	4.74E-01	69.32%	9.18E-03	1.34%	3.16E-04	0.05%	1.84E-01	1.84E-01	26.94%	1.61E-02	2.35%	-4.94E-02
Climate change – Biogenic	kg CO_2 eq	2.49E-03	-9.54E-03	-44.23%	2.91E-06	0.01%	1.17E-02	54.29%	3.02E-04	3.02E-04	1.40%	1.49E-05	0.07%	-1.85E-04
Climate change - Luluc	kg CO_2 eq	1.94E-03	1.30E-03	66.93%	4.47E-06	0.23%	1.12E-07	0.01%	6.25E-04	6.25E-04	32.27%	1.11E-05	0.57%	-6.01E-05
Ozone depletion (OD)	kg CFC-11 eq	2.49E-07	2.46E-07	98.88%	1.98E-10	0.08%	8.72E-12	0.00%	2.36E-09	2.36E-09	0.95%	2.25E-10	0.09%	-4.41E-09
Acidification of soil and water (A)	mol H^+ eq	8.53E-03	7.18E-03	84.21%	3.05E-05	0.36%	1.57E-06	0.02%	1.27E-03	1.27E-03	14.86%	4.79E-05	0.56%	-2.17E-04
Freshwater eutrophication	kg P eq	4.94E-05	3.33E-05	67.50%	7.36E-08	0.15%	3.00E-09	0.01%	1.57E-05	1.57E-05	31.83%	2.53E-07	0.51%	-1.75E-06
Marine aquatic eutrophication	kg N eq	8.06E-04	6.20E-04	76.93%	1.03E-05	1.28%	6.14E-07	0.08%	1.61E-04	1.61E-04	20.02%	1.37E-05	1.69%	-4.00E-05
Terrestrial eutrophication	mol N eq	1.09E-02	8.85E-03	80.87%	1.10E-04	1.01%	6.85E-06	0.06%	1.83E-03	1.83E-03	16.73%	1.46E-04	1.33%	-4.19E-04
Photochemical ozone creation (POCP)	kg NMVOC eq	3.27E-03	2.59E-03	79.15%	4.50E-05	1.38%	2.68E-06	0.08%	5.78E-04	5.78E-04	17.68%	5.60E-05	1.71%	-1.96E-04
Depletion of abiotic resources – elements	kg Sb eq	7.92E-05	7.74E-05	97.76%	2.94E-08	0.04%	1.51E-09	0.00%	1.68E-06	1.68E-06	2.12%	6.56E-08	0.08%	-3.84E-07
Depletion of abiotic resources – Fossil fuels	MJ	1.25E+01	8.75E+00	70.13%	1.30E-01	1.04%	4.13E-03	0.03%	3.41E+00	3.41E+00	27.33%	1.82E-01	1.46%	-1.06E+00
Water use	m^3 eq. depriv.	3.19E-01	2.51E-01	78.65%	5.31E-04	0.17%	2.41E-05	0.01%	6.61E-02	6.61E-02	20.72%	1.46E-03	0.46%	-2.69E-02

Results of inventory flows indicators & indicators describing the use of secondary materials for the reference product:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)	Distribution stage (module A4)	Installation stage (module A5)	Module B6	Use stage (modules B1-B7)	End-of-life stage (modules C1-C4)	Benefits (module D)
PERE	MJ	2.68E+00	1.98E+00	2.01E-03	3.13E-04	6.81E-01	6.81E-01	1.09E-02	-5.58E-02
PERM	MJ	1.24E-01	1.24E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.80E+00	2.11E+00	2.01E-03	3.13E-04	6.81E-01	6.81E-01	1.09E-02	-5.58E-02
PENRE	MJ	1.18E+01	8.07E+00	1.30E-01	4.13E-03	3.41E+00	3.41E+00	1.82E-01	-1.06E+00
PENRM	MJ	6.82E-01	6.82E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.25E+01	8.75E+00	1.30E-01	4.13E-03	3.41E+00	3.41E+00	1.82E-01	-1.06E+00
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	9.61E-03	5.69E-03	1.85E-05	1.85E-06	3.85E-03	3.85E-03	5.80E-05	-7.20E-04

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW: Freshwater use

Results of waste category indicators and output flow indicators for the reference product:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)	Distribution stage (module A4)	Installation stage (module A5)	Module B6	Use stage (modules B1-B7)	End-of-life stage (modules C1-C4)	Benefits (module D)
Hazardous waste disposed	kg	7.81E-05	7.09E-05	8.28E-07	2.18E-08	5.48E-06	5.09E-08	6.76E-07	1.16E-07
Non-hazardous waste disposed	kg	2.19E-01	1.84E-01	6.35E-03	5.93E-04	1.62E-02	2.48E-04	5.19E-03	7.40E-04
Radioactive waste disposed	kg	5.79E-05	3.93E-05	4.19E-08	3.45E-09	1.83E-05	6.60E-08	3.43E-08	7.57E-08
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	5.33E-02	1.61E-02	0.00E+00	4.39E-03	0.00E+00	0.00E+00	0.00E+00	3.28E-02
Materials for energy recovery	kg	4.01E-03	1.41E-03	0.00E+00	4.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Results of biogenic carbon for the reference product:

Indicator	Unit	Quantity
Biogenic carbon content of the product	Kg of C	0.00E+00
Biogenic carbon content of the packaging	kg of C	3.20E-03

Extrapolation rules

Extrapolations factors have been calculated to extrapolate the results of the reference product for the rest of the products of the homogeneous environmental family of socket outlets for Simon K45, Simon 500 Cima and Simon Cima ranges. These extrapolation factors are based on the main environmental aspects for each life cycle stage, since all the products of the family have the same manufacturing method and materials:

- Manufacturing, distribution and benefits stages: the total weight of each product (sum of the product itself and the packaging). Several versions include an additional variation due to the presence of a pilot light.
- Installation stage: weight of the packaging components of each product.
- Use stage: energy consumption due to the electrical losses of each product during the reference lifetime.
- End-of-life stage: weight of each product without the packaging components.

Extrapolation coefficients:

Range	SKU	Manufacturing stage (A1-A3)	Distribution stage (A4)	Installation stage (A5)	Use stage (B1-B7)	End-of-life stage (C1-C4)	Benefits (D)
500 Cima	50000432-030	2.69E+00	2.69E+00	2.42E+00	2.00E+00	2.73E+00	2.69E+00
500 Cima	50000432-037	2.69E+00	2.69E+00	2.42E+00	2.00E+00	2.73E+00	2.69E+00
500 Cima	50000458-030	2.47E+00	2.47E+00	2.22E+00	2.00E+00	2.50E+00	2.47E+00
500 Cima	50000458-037	2.47E+00	2.47E+00	2.22E+00	2.00E+00	2.50E+00	2.47E+00
500 Cima	50000458-038	2.47E+00	2.47E+00	2.22E+00	2.00E+00	2.50E+00	2.47E+00
500 Cima	50000459-037	7.41E+00	7.41E+00	6.66E+00	2.00E+00	7.50E+00	7.41E+00
500 Cima	50000468-030	2.74E+00	2.74E+00	2.46E+00	2.00E+00	2.78E+00	2.74E+00
500 Cima	50000468-037	2.74E+00	2.74E+00	2.46E+00	2.00E+00	2.78E+00	2.74E+00
500 Cima	50000468-038	2.74E+00	2.74E+00	2.46E+00	2.00E+00	2.78E+00	2.74E+00
500 Cima	50000469-037	2.74E+00	2.74E+00	2.46E+00	2.00E+00	2.78E+00	2.74E+00
500 Cima	50000472-030	2.47E+00	2.47E+00	2.22E+00	2.00E+00	2.50E+00	2.47E+00
500 Cima	50000472-037	2.47E+00	2.47E+00	2.22E+00	2.00E+00	2.50E+00	2.47E+00
500 Cima	50000802-039	3.53E-01	2.72E-01	2.44E-01	5.49E+01	2.75E-01	2.72E-01
500 Cima	50000803-039	2.47E-02	2.47E-02	2.22E-02	0.00E+00	2.50E-02	2.47E-02
500 Cima	50000996-039	3.21E-01	3.21E-01	2.89E-01	0.00E+00	3.25E-01	3.21E-01
500 Cima	50001041-038	6.42E-01	6.42E-01	5.77E-01	0.00E+00	6.50E-01	6.42E-01
500 Cima	50001841-030	6.42E-01	6.42E-01	5.77E-01	0.00E+00	6.50E-01	6.42E-01
500 Cima	50001841-037	6.42E-01	6.42E-01	5.77E-01	0.00E+00	6.50E-01	6.42E-01
500 Cima	50002432-039	2.20E+00	2.20E+00	1.98E+00	2.00E+00	2.23E+00	2.20E+00
500 Cima	50002472-039	2.17E+00	2.17E+00	1.95E+00	2.00E+00	2.20E+00	2.17E+00
500 Cima	50010432-030	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
500 Cima	50010432-037	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
500 Cima	50010432-038	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
500 Cima	50010472-030	3.53E+00	2.72E+00	2.44E+00	5.69E+01	2.75E+00	2.72E+00
500 Cima	50010472-037	3.53E+00	2.72E+00	2.44E+00	5.69E+01	2.75E+00	2.72E+00
500 Cima	50010472-038	3.53E+00	2.72E+00	2.44E+00	5.69E+01	2.75E+00	2.72E+00
500 Cima	50011041-033	8.99E-01	6.91E-01	6.22E-01	5.49E+01	7.00E-01	6.91E-01
500 Cima	50011041-065	8.99E-01	6.91E-01	6.22E-01	5.49E+01	7.00E-01	6.91E-01
500 Cima	50011041-072	8.99E-01	6.91E-01	6.22E-01	5.49E+01	7.00E-01	6.91E-01

Range	SKU	Manufacturing stage (A1-A3)	Distribution stage (A4)	Installation stage (A5)	Use stage (B1-B7)	End-of-life stage (C1-C4)	Benefits (D)
500 Cima	50011841-030	8.99E-01	6.91E-01	6.22E-01	5.49E+01	7.00E-01	6.91E-01
500 Cima	50011841-037	8.99E-01	6.91E-01	6.22E-01	5.49E+01	7.00E-01	6.91E-01
500 Cima	50011841-038	8.99E-01	6.91E-01	6.22E-01	5.49E+01	7.00E-01	6.91E-01
500 Cima	AC11	7.41E-02	7.41E-02	6.66E-02	0.00E+00	7.50E-02	7.41E-02
500 Cima	AC33/6	2.47E-02	2.47E-02	2.22E-02	0.00E+00	2.50E-02	2.47E-02
500 Cima	AC3325	6.42E-02	4.94E-02	4.44E-02	5.49E+01	5.00E-02	4.94E-02
K45	K01/14	1.11E+00	1.11E+00	9.99E-01	1.00E+00	1.13E+00	1.11E+00
K45	K01/6	1.11E+00	1.11E+00	9.99E-01	1.00E+00	1.13E+00	1.11E+00
K45	K01/7	1.11E+00	1.11E+00	9.99E-01	1.00E+00	1.13E+00	1.11E+00
K45	K01/8	1.11E+00	1.11E+00	9.99E-01	1.00E+00	1.13E+00	1.11E+00
K45	K01/9	1.11E+00	1.11E+00	9.99E-01	1.00E+00	1.13E+00	1.11E+00
K45	K02/14	1.16E+00	1.16E+00	1.04E+00	1.00E+00	1.18E+00	1.16E+00
K45	K02/6	1.16E+00	1.16E+00	1.04E+00	1.00E+00	1.18E+00	1.16E+00
K45	K02/8	1.16E+00	1.16E+00	1.04E+00	1.00E+00	1.18E+00	1.16E+00
K45	K02/9	1.16E+00	1.16E+00	1.04E+00	1.00E+00	1.18E+00	1.16E+00
K45	K03/14	7.90E-01	7.90E-01	7.10E-01	1.00E+00	8.00E-01	7.90E-01
K45	K03/9	7.90E-01	7.90E-01	7.10E-01	1.00E+00	8.00E-01	7.90E-01
K45	K04/14	9.63E-01	9.63E-01	8.66E-01	1.00E+00	9.75E-01	9.63E-01
K45	K04/9	9.63E-01	9.63E-01	8.66E-01	1.00E+00	9.75E-01	9.63E-01
K45	K05/14	9.88E-01	9.88E-01	8.88E-01	1.00E+00	1.00E+00	9.88E-01
K45	K05/6	9.88E-01	9.88E-01	8.88E-01	1.00E+00	1.00E+00	9.88E-01
K45	K05/9	9.88E-01	9.88E-01	8.88E-01	1.00E+00	1.00E+00	9.88E-01
K45	K06/14	6.42E-01	6.42E-01	5.77E-01	1.00E+00	6.50E-01	6.42E-01
K45	K06/6	6.42E-01	6.42E-01	5.77E-01	1.00E+00	6.50E-01	6.42E-01
K45	K06/9	6.42E-01	6.42E-01	5.77E-01	1.00E+00	6.50E-01	6.42E-01
K45	K07/14	6.91E-01	6.91E-01	6.22E-01	1.00E+00	7.00E-01	6.91E-01
K45	K07/9	6.91E-01	6.91E-01	6.22E-01	1.00E+00	7.00E-01	6.91E-01
K45	K08/14	7.41E-01	7.41E-01	6.66E-01	1.00E+00	7.50E-01	7.41E-01
K45	K08/9	7.41E-01	7.41E-01	6.66E-01	1.00E+00	7.50E-01	7.41E-01
K45	K11/14	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
K45	K11/27	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
K45	K11/6	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
K45	K11/7	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
K45	K11/8	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
K45	**K11/9**	**1.00E+00**	**1.00E+00**	**1.00E+00**	**1.00E+00**	**1.00E+00**	**1.00E+00**
K45	K111/9	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
K45	K12/14	2.07E+00	2.07E+00	1.60E+00	2.00E+00	2.13E+00	2.07E+00
K45	K12/6	2.07E+00	2.07E+00	1.60E+00	2.00E+00	2.13E+00	2.07E+00
K45	K12/9	2.07E+00	2.07E+00	1.60E+00	2.00E+00	2.13E+00	2.07E+00
K45	K13/14	2.07E+00	2.07E+00	1.60E+00	3.00E+00	2.13E+00	2.07E+00
K45	K13/6	2.07E+00	2.07E+00	1.60E+00	3.00E+00	2.13E+00	2.07E+00
K45	K13/9	2.07E+00	2.07E+00	1.60E+00	3.00E+00	2.13E+00	2.07E+00
K45	K14/14	4.31E+00	4.31E+00	3.00E+00	4.00E+00	4.48E+00	4.31E+00
K45	K14/6	4.31E+00	4.31E+00	3.00E+00	4.00E+00	4.48E+00	4.31E+00
K45	K14/9	4.31E+00	4.31E+00	3.00E+00	4.00E+00	4.48E+00	4.31E+00
K45	K15/14	9.11E-01	9.11E-01	1.80E+00	1.00E+00	8.00E-01	9.11E-01
K45	K15/9	9.11E-01	9.11E-01	1.80E+00	1.00E+00	8.00E-01	9.11E-01
K45	K22/14	1.36E+00	1.36E+00	3.80E+00	1.00E+00	1.05E+00	1.36E+00

Range	SKU	Manufacturing stage (A1-A3)	Distribution stage (A4)	Installation stage (A5)	Use stage (B1-B7)	End-of-life stage (C1-C4)	Benefits (D)
K45	K22/27	1.36E+00	1.36E+00	3.80E+00	1.00E+00	1.05E+00	1.36E+00
K45	K22/6	1.36E+00	1.36E+00	3.80E+00	1.00E+00	1.05E+00	1.36E+00
K45	K22/7	1.36E+00	1.36E+00	3.80E+00	1.00E+00	1.05E+00	1.36E+00
K45	K22/8	1.00E+00	1.00E+00	6.00E-01	1.00E+00	1.05E+00	1.00E+00
K45	K22/9	1.36E+00	1.36E+00	3.80E+00	1.00E+00	1.05E+00	1.36E+00
K45	K32/14	2.29E+00	2.29E+00	1.40E+00	2.00E+00	2.40E+00	2.29E+00
K45	K32/6	2.29E+00	2.29E+00	1.40E+00	2.00E+00	2.40E+00	2.29E+00
K45	K32/9	2.29E+00	2.29E+00	1.40E+00	2.00E+00	2.40E+00	2.29E+00
K45	K33/14	3.49E+00	3.49E+00	2.40E+00	3.00E+00	3.63E+00	3.49E+00
K45	K33/6	3.49E+00	3.49E+00	2.40E+00	3.00E+00	3.63E+00	3.49E+00
K45	K33/9	3.49E+00	3.49E+00	2.40E+00	3.00E+00	3.63E+00	3.49E+00
K45	K34/14	3.49E+00	3.49E+00	-7.60E+00	4.00E+00	4.88E+00	3.49E+00
K45	K34/6	4.67E+00	4.67E+00	3.00E+00	4.00E+00	4.88E+00	4.67E+00
K45	K34/9	4.67E+00	4.67E+00	3.00E+00	4.00E+00	4.88E+00	4.67E+00
K45	KL01/14	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL01/6	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL01/7	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL01/8	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL01/9	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL02/14	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL02/27	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL02/6	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KL02/9	1.54E+00	1.19E+00	1.07E+00	5.59E+01	1.20E+00	1.19E+00
K45	KLS01/14	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS01/6	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS01/7	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS01/8	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS01/9	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS02/14	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS02/6	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KLS02/9	1.64E+00	1.26E+00	1.13E+00	5.59E+01	1.28E+00	1.26E+00
K45	KS11/14	1.33E+00	1.33E+00	1.20E+00	1.00E+00	1.35E+00	1.33E+00
K45	KS11/6	1.33E+00	1.33E+00	1.20E+00	1.00E+00	1.35E+00	1.33E+00
K45	KS11/8	1.33E+00	1.33E+00	1.20E+00	1.00E+00	1.35E+00	1.33E+00
K45	KS11/9	1.33E+00	1.33E+00	1.20E+00	1.00E+00	1.35E+00	1.33E+00
K45	KS22/14	1.19E+00	1.19E+00	1.07E+00	1.00E+00	1.20E+00	1.19E+00
K45	KS22/6	1.19E+00	1.19E+00	1.07E+00	1.00E+00	1.20E+00	1.19E+00
K45	KS22/7	1.19E+00	1.19E+00	1.07E+00	1.00E+00	1.20E+00	1.19E+00
K45	KS22/9	1.19E+00	1.19E+00	1.07E+00	1.00E+00	1.20E+00	1.19E+00
CIMA	RS01/14	4.49E-01	3.46E-01	3.11E-01	0.00E+00	3.50E-01	3.46E-01
CIMA	RS01/6	4.49E-01	3.46E-01	3.11E-01	0.00E+00	3.50E-01	3.46E-01
CIMA	RS01/9	4.49E-01	3.46E-01	3.11E-01	0.00E+00	3.50E-01	3.46E-01
CIMA	S1/14	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/14/8	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/6	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/6/14	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/6/8	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/6/9	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00

Range	SKU	Manufacturing stage (A1-A3)	Distribution stage (A4)	Installation stage (A5)	Use stage (B1-B7)	End-of-life stage (C1-C4)	Benefits (D)
CIMA	S1/7	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/8	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S1/9	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/14	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/14/8	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/6	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/6/14	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/6/8	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/6/9	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/7	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/8	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00
CIMA	S2/9	3.59E+00	2.77E+00	2.49E+00	5.69E+01	2.80E+00	2.77E+00