

FN AND EXI RCCB

PEP ecopassport® Product Environmental Profile



Product Environmental Profile - PEP Ecopassport.
Document in compliance with ISO 14025: 2006 "Environmental labels and declarations. Type III environmental declarations"

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ABB Purpose & Embedding Sustainability

Committed to continually promoting and embedding sustainability across its operations and value chain, aspiring to become a role model for others to follow. With its Purpose, focused on reducing harmful emissions, preserving natural resources and championing ethical and humane behavior.

"other points or for example a QR code or link to AEG website, where more information on the topic"



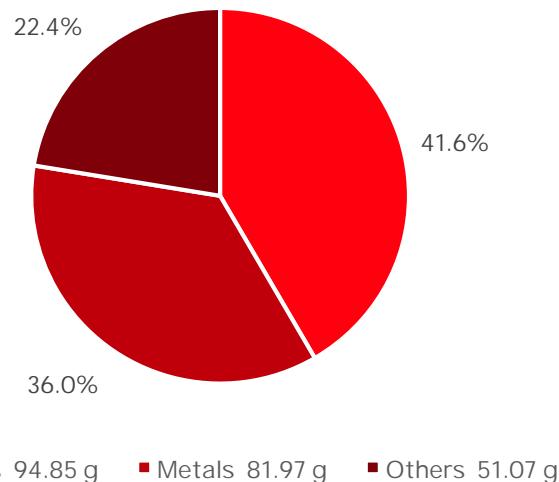
General Information

Reference product	2CSF702156R1630 FN263/A30
Description of the product	The RCCBs FN and EXI family assures protection to people and installations against fault current to earth. A large offer for standard instantaneous and selective AC, A, F and other types types.
Functional unit	The functional unit is to protect the installation against overloads and short circuits and protect people and premises at risk of fire or explosion against insulation defects in a circuit with rated voltage Ue 230V, rated current In = 63A, with Np = 2 poles, a rated breaking capacity Icn = 6kA, the sensitivity S= 30mA, and the differential protection type Tp A, in the Household/Commercial application areas, according to the appropriate use scenario, and during the reference service life of the product of 20 years.'
Other products covered	FN200 environmental homogeneous family: Family: FN, EXI, DAG, DCG, DV, DH Sizes: 2 and 4 poles Rated Current [A]: 25, 40, 63, 80, 100 Rated Sensitivity [A]: 0.03, 0.1, 0.3, 0.5 Type of differential protection: A/F/AC/Ai/AS/F/G/PN/Si

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Constituent Materials



Total weight in reference product included packaging

228

g

Plastics as % of weight		Metals as % of weight		Others as % of weight	
Name and CAS number	Weight%	Name and CAS number	Weight%	Name and CAS number	Weight%
Polyamide PA6 part, glass filled	23.7	steel	16.1	Packaging - Carton and corrugated carton box	14.5
PBT part, glass filled	6.1	Copper	10.3	Magnetic core	4.0
Polyamide PA66 part, glass filled	5.6	Brass	7.2	Magnetic relay	2.5
Polyphenylene sulfide part, glass filled	3.2	Stainless steel	1.8	Cellulose part	0.7
other plastics	3.0	other metals	0.6	Other	0.7

Total weight of the reference product 195 g plus packaging is 228g.

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Additional Environmental Information

Manufacturing	The manufacturing stage includes the production and transportation to the manufacturer's last logistic platform of FN and EXI and its packaging. The production occurs at the factory located in Santa Palomba (RM). The transport from Santa Palomba factory to Vignate, Milan was taken into account.
Distribution	For the distribution of the product from Vignate to the final customer, the intracontinental transport scenario provided by PCR-ed4-EN-2021 09 06 standard was adopted, considering the European macro-area.
Installation	The installation phase only implies manual activities and no energy is consumed. This phase also includes the disposal of the packaging of the product. Statistical average data from Eurostat databases were considered for the disposal of the product and its packaging.
Use	FN and EXI dissipate some electricity due to power losses. The average power loss of the switch has been calculated as follow: - Nominal current load rate as 15% (Household / Commercial); - RSL of 20 years; - Functioning time of 30% of the RSL (α). No maintenance is planned for the product.
End of life	As the end-of-life treatment is inherently unknown, the default scenario from the reference PCR was used. This includes the default assumption of transportation of 1000 km by lorry and the assumption that the product components are disposal of via landfill (P.E.P. Association, PCR-ed4-EN-2021 09 06, page 25/78).
Benefits and loads beyond the system boundaries	The potential benefits derives from the impacts prevented by recycling and waste to energy recovery of the packaging in the installation phase

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Environmental Impacts

Reference lifetime	20 years
Product category	Differential circuit-breakers
Installation elements	No installation materials are required in the life cycle of the product.
Use scenario	The calculation of the use stage electricity consumption from the average power consider the following assumptions: - Nominal current load rate as 15% (Household / Commercial); - RSL of 20 years; - Functioning time of 30% of the RSL. No maintenance is planned for the product
Geographical representativeness	Europe
Technological representativeness	Technological representativeness refers to the specific production process for primary data.
Software and database used	SimaPro 9.5 and ecoinvent 3.9.1

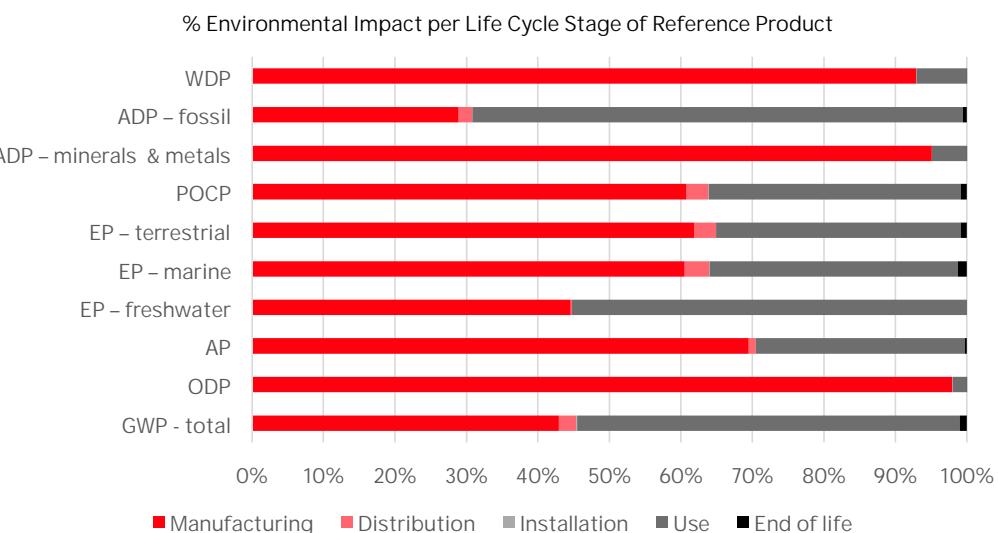
Energy model used

Manufacturing	GO energy mix 2022. The energy-related processes used for the remaining inputs are those included in the ecoinvent v3.9.1 datasets.
Installation	No energy consumption occur during the installation stage.
Use	Electricity, low voltage {RER} market group for electricity, low voltage Cut-off, S
End of life	The energy-related processes used for the inputs of the end-of-life stage are those included in the ecoinvent datasets selected for the analysis.

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Common base of mandatory indicators

* if indicator is "0*", it represents less than 0,01% of the total life cycle of the reference flow



Environmental impact indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
GWP-total	kg CO ₂ eq.	6.38E+00	2.74E+00	1.53E-01	7.27E-03	3.41E+00	6.43E-02	-4.90E-02
GWP-fossil	kg CO ₂ eq.	6.26E+00	2.67E+00	1.53E-01	1.52E-03	3.38E+00	5.50E-02	-4.41E-02
GWP-biogenic	kg CO ₂ eq.	1.00E-01	6.37E-02	5.45E-05	5.75E-03	2.13E-02	9.31E-03	-3.90E-03
GWP-luluc	kg CO ₂ eq.	1.28E-02	4.43E-03	7.35E-05	0*	8.30E-03	2.11E-05	-1.02E-03
GWP-fossil = Global Warming Potential fossil fuels								
GWP-biogenic = Global Warming Potential biogenic								
GWP-luluc = Global Warming Potential land use and land use change								
ODP	kg CFC-11 eq.	3.22E-06	3.16E-06	3.26E-09	0*	6.34E-08	9.03E-10	-1.03E-09
ODP = Depletion potential of the stratospheric ozone layer								
AP	H+ eq.	6.52E-02	4.53E-02	6.18E-04	0*	1.91E-02	1.79E-04	-2.89E-04
AP = Acidification potential, Accumulated Exceedance								
EP-freshwater	kg P eq.	5.96E-04	2.66E-04	1.20E-06	0*	3.29E-04	3.52E-07	-9.86E-06
EP-marine	kg N eq.	6.91E-03	4.18E-03	2.34E-04	6.95E-06	2.39E-03	8.96E-05	-1.43E-04
EP-terrestrial	mol N eq.	8.17E-02	5.05E-02	2.52E-03	2.13E-05	2.79E-02	7.23E-04	-9.68E-04
EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment								
EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment								
EP-terrestrial = Eutrophication potential, Accumulated Exceedance								
POCP	kg NMVOC eq.	2.03E-02	1.23E-02	6.23E-04	6.90E-06	7.14E-03	1.85E-04	-1.63E-04
POCP = Formation potential of tropospheric ozone								
ADP-minerals & metals	kg Sb eq.	8.29E-04	7.89E-04	4.82E-07	0*	4.03E-05	1.30E-07	-1.74E-07
ADP-fossil	MJ	1.10E+02	3.19E+01	2.13E+00	1.52E-02	7.57E+01	6.05E-01	-5.71E-01
ADP-minerals & metals = Abiotic depletion potential for non-fossil resources								
ADP-fossil = Abiotic depletion for fossil resources potential								
WDP	m ³ eq. depr.	1.23E+01	1.14E+01	8.49E-03	0*	8.61E-01	4.44E-03	-5.55E-02
WDP = Water Deprivation potential								

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Common base of mandatory indicators

* if indicator is "0*", it represents less than 0,01% of the total life cycle of the reference flow

Inventory flows indicator – Resource use indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
PERE	MJ	2.17E+01	4.67E+00	3.30E-02	0*	1.70E+01	9.67E-03	-2.96E-01
PERM	MJ	6.92E-01	6.92E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.42E-02
PERT	MJ	2.24E+01	5.36E+00	3.30E-02	0*	1.70E+01	9.67E-03	-3.10E-01
PENRE	MJ	1.26E+02	3.51E+01	2.17E+00	1.67E-02	8.84E+01	6.17E-01	-6.70E-01
PENRM	MJ	2.66E+00	2.66E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.29E+02	3.77E+01	2.17E+00	1.67E-02	8.84E+01	6.17E-01	-6.70E-01

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 resources

Inventory flows indicator – Indicators describing the use of secondary materials, water, and energy resources

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
SM	kg	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
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	3.28E-01	2.67E-01	2.40E-04	0*	6.09E-02	1.15E-04	-1.43E-03

SM = Use of secondary material

RSF = Use of renewable secondary fuels

NRSF = Use of non-renewable secondary fuels

FW = Use of net fresh water

Inventory flows indicator – Waste category indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
Hazardous waste disposed	kg	1.22E-03	1.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste disposed	kg	3.43E-05	3.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radioactive waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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Common base of mandatory indicators

* if indicator is "0*", it represents less than 0,01% of the total life cycle of the reference flow

Inventory flows indicator – Output flow indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
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
Materials for recycling	kg	2.71E-02	0.00E+00	0.00E+00	2.71E-02	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	2.97E-03	0.00E+00	0.00E+00	2.97E-03	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	4.73E-02	0.00E+00	0.00E+00	4.73E-02	0.00E+00	0.00E+00	0.00E+00

Inventory flow indicator – other indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
Biogenic carbon content of the product	kg of C	2.20E-04	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the associated packaging	kg of C	1.45E-02	1.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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Optional indicators

Environmental indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
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No
Environmental
indicators used

Other indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
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No Other
indicators used

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Extrapolation Factors

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by a linear correlation with respect to weight for the production, distribution and end-of-life phase and with respect to average power loss for the use phase. Each environmental indicator value shall be calculated using the following formulas:

For the manufacturing stage, distribution stage and end-of-life stage: $y = ax_1 + b$
where x_1 is the weight of the product

For the use stage: $y = ax_2 + b$
where x_2 is the average power loss of the product

Impact category	Manufacturing		Distribution		Use		End of Life	
	a	b	a	b	a	b	a	b
Climate change - Total	1,14E-02	1,38E-01	6,72E-04	-1,89E-15	1,90E+01	3,37E-02	2,84E-04	-5,22E-04
Climate change - Fossil	1,13E-02	1,05E-01	6,71E-04	-2,00E-15	1,88E+01	3,34E-02	2,43E-04	-4,47E-04
Climate change - Biogenic standard	1,34E-04	3,30E-02	2,39E-07	8,13E-20	1,18E-01	2,10E-04	4,12E-05	-7,45E-05
Climate change - Land use and LU change	1,88E-05	1,46E-04	3,22E-07	9,89E-19	4,62E-02	8,20E-05	9,32E-08	-1,71E-07
Ozone depletion	1,39E-08	-2,04E-08	1,43E-11	-5,79E-24	3,52E-07	6,25E-10	3,99E-12	-7,32E-12
Acidification	1,97E-04	3,73E-04	2,71E-06	1,18E-17	1,06E-01	1,88E-04	7,91E-07	-1,45E-06
Eutrophication. freshwater	1,15E-06	3,53E-06	5,27E-09	-2,12E-21	1,83E-03	3,25E-06	1,56E-09	-2,86E-09
Eutrophication. marine	1,80E-05	7,60E-05	1,03E-06	8,13E-19	1,33E-02	2,36E-05	3,96E-07	-7,27E-07
Eutrophication. terrestrial	2,15E-04	1,58E-03	1,10E-05	3,04E-18	1,55E-01	2,76E-04	3,20E-06	-5,86E-06
Photochemical ozone formation	5,31E-05	2,15E-04	2,73E-06	-1,31E-17	3,97E-02	7,05E-05	8,17E-07	-1,50E-06
Resource use. minerals and metals	3,46E-06	-1,29E-06	2,12E-09	2,01E-21	2,24E-04	3,98E-07	5,77E-10	-1,06E-09
Resource use. fossils	1,35E-01	1,14E+00	9,34E-03	-8,88E-15	4,21E+02	7,47E-01	2,68E-03	-4,91E-03
Water use	4,95E-02	1,37E-01	3,72E-05	7,63E-17	4,79E+00	8,50E-03	1,96E-05	-3,60E-05
Primary renewable energy (carrier)	1,55E-02	1,14E+00	1,45E-04	6,25E-17	9,44E+01	1,68E-01	4,28E-05	-7,84E-05
Primary renewable energy (feedstock)	2,92E-03	2,58E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Primary renewable energy (total)	1,84E-02	1,16E+00	1,45E-04	6,25E-17	9,44E+01	1,68E-01	4,28E-05	-7,84E-05
Primary non-renewable energy (carrier)	1,48E-01	1,39E+00	9,50E-03	-4,44E-16	4,91E+02	8,72E-01	2,73E-03	-5,00E-03
Primary non-renewable energy (feedstock)	1,18E-02	-2,14E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Primary non-renewable energy (total)	1,59E-01	1,37E+00	9,50E-03	-4,44E-16	4,91E+02	8,72E-01	2,73E-03	-5,00E-03
Secondary materials	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Renewable secondary fuels	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non-renewable secondary fuels	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water (EI3.6)	1,16E-03	3,19E-03	1,05E-06	-3,09E-18	3,39E-01	6,02E-04	5,08E-07	-9,31E-07
Hazardous waste disposed	5,37E-06	-7,84E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non hazardous waste disposed	1,51E-07	-2,21E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Radioactive waste disposed	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Components for re-use	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

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Extrapolation Factors

For the weight and average power loss data of the variants, please refer to the table below

Product ID	Product Type	Total Weight [g]	Average power loss [W]
2CSF704056R1250	FN425/AC30	367	0.08
2CSF702056R1250	FN225/AC30	228	0.03
2CSF704056R3250	FN425/AC300	367	0.08
2CSF702056R3250	FN225/AC300	228	0.03
2CSF704056R1400	FN440/AC30	367	0.21
2CSF702056R1400	FN240/AC30	228	0.08
2CSF704056R3400	FN440/AC300	367	0.21
2CSF702056R3400	FN240/AC300	228	0.08
2CSF704056R1630	FN463/AC30	396	0.33
2CSF702056R1630	FN263/AC30	228	0.18
2CSF704056R3630	FN463/AC300	396	0.33
2CSF702056R3630	FN263/AC300	228	0.18
2CSF704156R1250	FN425/A30	367	0.08
2CSF702156R1250	FN225/A30	228	0.03
2CSF702656R1400	FN240/G30	228	0.08
2CSF704156R3250	FN425/A300	367	0.08
2CSF702156R3250	FN225/A300	228	0.03
2CSF704156R4250	FN425/A500	367	0.08
2CSF704156R1400	FN440/A30	367	0.21
2CSF702156R1400	FN240/A30	228	0.08
2CSF704156R3400	FN440/A300	367	0.21
2CSF702156R3400	FN240/A300	228	0.08
2CSF704156R4400	FN440/A500	367	0.21
2CSF704156R1630	FN463/A30	396	0.33
2CSF702156R1630	FN263/A30	228	0.18
2CSF704156R3630	FN463/A300	396	0.33
2CSF702156R3630	FN263/A300	228	0.18
2CSF704156R4630	FN463/A500	396	0.33
2CSF704256R3400	FN440/AS300	367	0.21
2CSF704256R3400	FN440/AS300	367	0.21
2CSF704256R3630	FN463/AS300	396	0.33
2CSF704256R4630	FN463/AS500	396	0.33
2CSF704356R1400	FN440/F30	367	0.21
2CSF702356R1400	FN240/F30	228	0.08
2CSF704356R1630	FN463/F30	396	0.33
2CSF702356R1630	FN263/F30	228	0.18
2CSF704456R1250	FN425/Ai30	367	0.08
2CSF702456R1250	FN225/Ai30	228	0.03
2CSF704456R1400	FN440/Ai30	367	0.21
2CSF702456R1400	FN240/Ai30	228	0.08
2CSF704456R1630	FN463/Ai30	396	0.33
2CSF702456R1630	FN263/Ai30	228	0.18
2CSF704656R1250	FN425/G30	367	0.08
2CSF704656R1400	FN440/G30	367	0.21
2CSF704656R2400	FN440/G100	367	0.21
2CSF704756R3250	FN425/Si300	367	0.08
2CSF702756R3250	FN225/Si300	228	0.03
2CSF704756R3400	FN440/Si300	367	0.21
2CSF702756R3400	FN240/Si300	228	0.08
2CSF704756R3630	FN463/Si300	396	0.33

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Extrapolation Factors

2CSF702756R3630	FN263/Si300	228	0.18
2CSF702054R1250	EXI225/AC30	228	0.03
2CSF702054R1250	EXI225/AC30	228	0.03
2CSF702054R1250	EXI225/AC30	228	0.03
2CSF704054R1250	EXI425/AC30	367	0.08
2CSF702054R2250	EXI225/AC100	228	0.03
2CSF704054R2250	EXI425/AC100	367	0.08
2CSF702054R3250	EXI225/AC300	228	0.03
2CSF702054R3250	EXI225/AC300	228	0.03
2CSF704054R3250	EXI425/AC300	367	0.08
2CSF702054R4250	EXI225/AC500	228	0.03
2CSF704054R4250	EXI425/AC500	367	0.08
2CSF702054R1400	EXI240/AC30	228	0.08
2CSF702054R1400	EXI240/AC30	228	0.08
2CSF702054R1400	EXI240/AC30	228	0.08
2CSF704054R1400	EXI440/AC30	367	0.21
2CSF702054R2400	EXI240/AC100	228	0.08
2CSF704054R2400	EXI440/AC100	367	0.21
2CSF702054R3400	EXI240/AC300	228	0.08
2CSF702054R3400	EXI240/AC300	228	0.08
2CSF704054R3400	EXI440/AC300	367	0.21
2CSF702054R4400	EXI240/AC500	228	0.08
2CSF704054R4400	EXI440/AC500	367	0.21
2CSF702054R1630	EXI263/AC30	228	0.18
2CSF704054R1630	EXI463/AC30	396	0.33
2CSF702054R2630	EXI263/AC100	228	0.18
2CSF704054R2630	EXI463/AC100	396	0.33
2CSF702054R3630	EXI263/AC300	228	0.18
2CSF704054R3630	EXI463/AC300	396	0.33
2CSF702054R4630	EXI263/AC500	228	0.18
2CSF704054R4630	EXI463/AC500	396	0.33
2CSF702154R1250	EXI225/A30	228	0.03
2CSF702154R1250	EXI225/A30	228	0.03
2CSF704154R1250	EXI425/A30	367	0.08
2CSF702154R3250	EXI225/A300	228	0.03
2CSF704154R3250	EXI425/A300	367	0.08
2CSF702154R1400	EXI240/A30	228	0.08
2CSF702154R1400	EXI240/A30	228	0.08
2CSF704154R1400	EXI440/A30	367	0.21
2CSF704151R1400	EXI440/A30	367	0.21
2CSF704154R2400	EXI440/A100	367	0.21
2CSF702154R3400	EXI240/A300	228	0.08
2CSF704154R3400	EXI440/A300	367	0.21
2CSF702154R1630	EXI263/A30	228	0.18
2CSF704154R1630	EXI463/A30	396	0.33
2CSF702154R3630	EXI263/A300	228	0.18
2CSF704154R3630	EXI463/A300	396	0.33
2CSF702254R3250	EXI225/AS300	228	0.03
2CSF704254R3250	EXI425/AS300	367	0.08
2CSF702254R3400	EXI240/AS300	228	0.08
2CSF704254R3400	EXI440/AS300	367	0.21
2CSF702254R4400	EXI240/AS500	228	0.08
2CSF704254R4400	EXI440/AS500	367	0.21
2CSF704254R3630	EXI463/AS300	396	0.33
2CSF704254R4630	EXI463/AS500	396	0.33

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Extrapolation Factors

2CSF702454R1250	EXI225/Ai30	228	0.03
2CSF704454R1250	EXI425/Ai30	367	0.08
2CSF702454R1400	EXI240/Ai30	228	0.08
2CSF704454R1400	EXI440/Ai30	367	0.21
2CSF702454R1630	EXI263/Ai30	228	0.18
2CSF704454R1630	EXI463/Ai30	396	0.33
2CSF704154R2630	EXI463/A100	396	0.33
2CSF702254R3630	EXI263/AS300	228	0.18
2CSF702254R5630	EXI263/AS500	228	0.18
2CSF704956R1630	FN463/A30PN	396	0.33
2CSF704954R1630	EXI463/A30PN	396	0.33
2CSF202154R1250	DAG+225/30	236	0.05
2CSF202154R1400	DAG+240/30	237	0.11
2CSF202054R1250	DCG+225/30	238	0.05
2CSF202054R1400	DCG+240/30	239	0.11
2CSF202055R1250	RCCB/DCG+ AC/2 25/0,03	240	0.05
2CSF202055R1400	RCCB/DCG+ AC/2 40/0,03	241	0.11
2CSF702056R3800	FN280/AC300	254	0.20
2CSF702056R3900	FN2100/AC300	254	0.29
2CSF704056R3800	FN480/AC300	421	0.36
2CSF704056R3900	FN4100/AC300	421	0.55
2CSF704156R1800	FN480/A30	421	0.36
2CSF704156R3800	FN480/A300	421	0.36
2CSF704156R3900	FN4100/A300	421	0.55
2CSF704156R1900	FN4100/A30	421	0.55
2CSF702156R1800	FN280/A30	254	0.20
2CSF702156R3800	FN280/A300	254	0.20
2CSF704256R4800	FN480/AS500	421	0.36
2CSF704256R3900	FN4100/AS300	421	0.55
2CSF704756R3800	FN480/Si300	421	0.36
2CSF704756R3900	FN4100/Si300	421	0.55
2CSF704056R1800	FN480/AC30	421	0.36
2CSF704056R3800	FN480/AC300	421	0.36
2CSF704156R3900	FN4100/A300	421	0.55
2CSF704156R3800	FN480/A300	421	0.36
2CSF704056R2800	FN480/AC100	421	0.36
2CSF704156R2900	FN4100/A100	421	0.55
2CSF702056R1800	FN280/AC30	254	0.20
2CSF704056R1900	FN4100/AC30	421	0.55
2CSF702156R3900	FN2100/A300	254	0.29
2CSF704056R4800	FN480/AC500	421	0.36
2CSF704156R4800	FN480/A500	421	0.36
2CSF704256R4900	FN4100/AS500	421	0.55
2CSF704056R4900	FN4100/AC500	421	0.55
2CSF704156R4900	FN4100/A500	421	0.55
2CSF202072R1250	DV225/AC30	236	0.05
2CSF202072R1400	DV240/AC30	236	0.11
2CSF202172R1250	DV225/A30	236	0.05
2CSF202172R1400	DV240/A30	236	0.11
2CSF202071R1250	DH225/AC30	236	0.05
2CSF202071R1400	DH240/AC30	236	0.11
2CSF202071R1630	DH263/AC30	236	0.14
2CSF204071R1250	DH425/AC30	387	0.09
2CSF204071R1400	DH440/AC30	387	0.22
2CSF204071R1630	DH463/AC30	387	0.30

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Environmental Impact Indicator Glossary

Impact indicators

Indicator	Description	Distribution
Global warming potential (GWP) - total	<p>Indicator of potential global warming caused by emissions to air contributing to the greenhouse effect. The total global warming potential (GWP-total) is the sum of three sub-categories of climate change.</p> <p>GWP-total = GWP-fossil + GWP-biogenic + GWP- land use and land use change</p>	kg CO ₂ eq.
Ozone depletion (ODP)	Emissions to air that contribute to the destruction of the stratospheric ozone layer	kg CFC-11 eq.
Acidification of soil and water (A)	Acidification of soils and water caused by the release of certain gases to the atmosphere, such as nitrogen oxides and sulphur oxides	H+ eq.
Eutrophication (E)	Indicator of the contribution to eutrophication of water by the enrichment of the aquatic ecosystem with nutritional elements, e.g. industrial or domestic effluents, agriculture, etc. This indicator is divided to three: freshwater, marine and terrestrial.	kg P eq., kg N eq., mole N eq.
Photochemical ozone creation (POCP)	Indicator of emissions of gases that affect the creation of photochemical ozone in the lower atmosphere (smog) because of the rays of the sun.	kg NMVOC eq.
Depletion of abiotic resources – elements (ADPe)	Indicator of the depletion of natural non-fossil resources	kg Sb eq.
Depletion of abiotic resources – fossil fuels (ADPf)	The use of non-renewable fossil resources in an unsustainable way (e.g. from material to waste)	MJ (lower heating value)
Water Deprivation potential (WDP)	Deprivation-weighted water consumption. Assesses the potential of water deprivation, to either humans or ecosystems, building on the assumption that the less water remaining available per area, the more likely another user will be deprived.	m ³ eq. depr.

Resource use indicators

Indicator	Description	Distribution
Total use of primary energy	<p>Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) + Total use of renewable primary energy re-sources (primary energy and primary energy resources used as raw materials)</p>	MJ (lower heating value)

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Verifier accreditation number:	VH50	Information and reference documents: www.pep-ecopassport.org	
Date of issue:	04/2024	Validity period: 5 years	
Independent verification of the declaration and data, in compliance with ISO 14025: 2006			
Internal: <input type="radio"/>	External: <input checked="" type="radio"/>		
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)			
PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019 The components of the present PEP may not be compared with components from any other program.			
Document in compliance with ISO 14025: 2006 "Environmental labels and declarations. Type III environmental declarations"			

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