

F200 BLOCKS AND DIFFERENTIAL SWITCHES

PEP ecopassport®
Product Environmental Profile



Registration number:	ABBG-00554-V01.02-EN	Drafting rules:	PCR-ed4-EN-2021 09 06
Contact information:	EPD_ELSB@abb.com	Supplemented by:	PSR-0005-ed3-EN-2023 06 06
Verifier accreditation number:	VH50	Information and reference documents:	www.pep-ecopassport.org
Date of issue:	March-24	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 (Ddomain)			
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"			





ABB Purpose & Embedding Sustainability

ABB is 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 ABB Purpose, ABB is focusing on reducing harmful emissions, preserving natural resources and championing ethical and humane behavior.

The context of this PEP cannot be compared with the content based on another program/database.

Scan QR code for more information

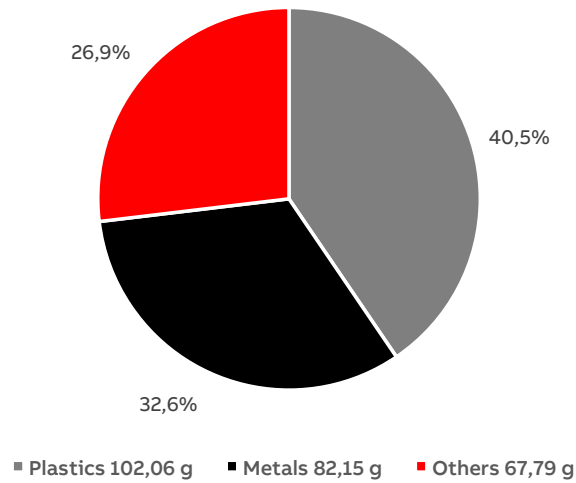


General information

Reference product	2CSF202001R1630 F202 AC-63/0.03
Description of the product	The RCCBs F200 family assures protection to people and installations against fault current to earth. A large offer for standard instantaneous and selective AC, A and F types is completed with some configurations for special applications.
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 U_e 230V, rated current $I_n = 63A$, with $N_p = 2$ poles, a rated breaking capacity $I_{cn} = 10kA$, the sensitivity $S = 30mA$, and the differential protection type T_p AC, 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	F200 environmental homogeneous family: Family: F200, FX200, VY Sizes: 2 and 4 poles Rated Current [A]: 16, 25, 40, 63, 80, 100 Rated Sensitivity [A]: 0.01, 0.03, 0.1, 0.3, 0.5, 1 Type of differential protection: A, F, AC
Manufacturing address	ABB S.p.A. – ELSB Viale dell'Industria, 18 20009 Vittuone (MI) - Italy www.new.abb.com



Constituent Materials



Total weight of reference product and packaging

252,0

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%
PA6, glass filled	24,4	steel	19,5	Carton and carton box	19,7
PBT, glass filled	5,6	brass	7,4	Magnetic core	3,6
PA66, glass filled	5,1	Copper	3,6	Magnetic relay	2,3
PPS, glass filled	2,9	Stainless steel	1,6	Cellulose part	0,6
other plastics	2,5	other metals	0,5	Other	0,7

Total weight of the reference product 202 g plus packaging is 252g.



Additional Information

Manufacturing	The manufacturing stage includes the production and transportation to the manufacturer's last logistic platform of F200 and its packaging. The production occurs at the ABB factory located in Santa Palomba (RM).
Distribution	The transport from ABB Santa Palomba factory to Vignate, Milan was taken into account. 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	F200 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



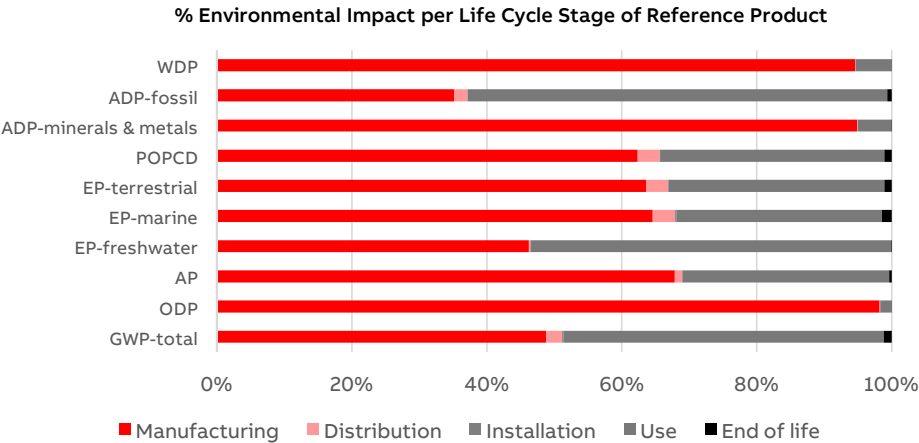
Environmental Impacts

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	ABB 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.

Common base of mandatory indicators



Environmental impact indicators

Indicator		Unit	Total	Manufacturin g	Distribu tion	Installation	Use	End of life	Benefits
GWP	Total	kg CO2 eq.	5,81E+00	2,83E+00	1,40E-01	1,09E-02	2,76E+00	6,77E-02	-4,90E-02
	Fossil	kg CO2 eq.	5,69E+00	2,76E+00	1,40E-01	2,28E-03	2,73E+00	5,74E-02	-4,41E-02
	Biogenic	kg CO2 eq.	1,09E-01	7,32E-02	4,98E-05	8,65E-03	1,72E-02	1,02E-02	-3,90E-03
	Luluc	kg CO2 eq.	1,19E-02	5,07E-03	6,72E-05	1,24E-06	6,71E-03	2,19E-05	-1,02E-03
ODP		kg CFC-11 eq.	3,09E-06	3,04E-06	2,98E-09	0*	5,12E-08	9,39E-10	-1,03E-09
AP		H+ eq.	5,04E-02	3,42E-02	5,64E-04	9,68E-06	1,54E-02	1,86E-04	-2,89E-04
EP	Freshwater	kg P eq.	4,97E-04	2,30E-04	1,10E-06	0*	2,66E-04	3,66E-07	-9,86E-06
	Marine	kg N eq.	6,36E-03	4,11E-03	2,14E-04	1,05E-05	1,94E-03	9,39E-05	-1,43E-04
	Terrestrial	mol N eq.	7,05E-02	4,48E-02	2,30E-03	3,21E-05	2,26E-02	7,52E-04	-9,68E-04
POPCD		kg NMVOC eq.	1,74E-02	1,08E-02	5,69E-04	1,04E-05	5,78E-03	1,92E-04	-1,63E-04
ADP	Minerals & metals	kg SB eq.	6,50E-04	6,17E-04	4,41E-07	0*	3,26E-05	1,36E-07	-1,74E-07
	Fossil	MJ	9,84E+01	3,46E+01	1,95E+00	2,29E-02	6,12E+01	6,29E-01	-5,71E-01
WDP		m³ eq. depr.	1,30E+01	1,23E+01	7,76E-03	0*	6,96E-01	4,62E-03	-5,55E-02

Resource use indicators

Indicator	Unit	Total	Manufacturin g	Distribution	Installation	Use	End of life	Benefits
PERE	MJ	1,87E+01	4,97E+00	3,02E-02	0,00E+00	1,37E+01	1,01E-02	-2,96E-01
PERM	MJ	1,90E-01	1,90E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,42E-02
PERT	MJ	1,89E+01	5,16E+00	3,02E-02	0*	1,37E+01	1,01E-02	-3,10E-01
PENRE	MJ	1,03E+02	3,22E+01	1,52E+00	2,51E-02	6,88E+01	4,56E-01	-6,70E-01
PENRM	MJ	2,86E+00	2,86E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	1,06E+02	3,51E+01	1,52E+00	2,51E-02	6,88E+01	4,56E-01	-6,70E-01

Common base of mandatory indicators

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	m³	3,36E-01	2,87E-01	2,19E-04	0*	4,93E-02	1,19E-04	-1,43E-03

Waste category indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
HWD	kg	2,11E-03	2,11E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
N-HWD	kg	2,30E-04	2,30E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RWD	kg	2,01E-06	2,01E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Output flow indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
CfRu	kg	3,13E-03	3,13E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MfR	kg	4,07E-02	0,00E+00	0,00E+00	4,07E-02	0,00E+00	0,00E+00	0,00E+00
MfER	kg	4,47E-03	0,00E+00	0,00E+00	4,47E-03	0,00E+00	0,00E+00	0,00E+00
EE	MJ	7,60E-02	0,00E+00	0,00E+00	7,60E-02	0,00E+00	0,00E+00	0,00E+00

Other indicators

Indicator		Unit	Total
Biogenic Carbon	Product	kg of C	2,20E-04
	Packaging	kg of C	2,19E-02

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

* if the coefficient is 1!, the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Impact Category	Manufacturing		Distribution		Installation		Use		End of Life	
	a1	b1	a2	b2	a3	b3	a4	b4	a5	b5
GWP-total	2,04E-02	-2,31E+00	5,87E-04	-7,98E-03	0,00E+00	0,00E+00	1,85E+01	1,01E-01	4,29E-04	-4,04E-02
GWP-fossil	2,04E-02	-2,38E+00	5,87E-04	-7,97E-03	0,00E+00	0,00E+00	1,83E+01	1,00E-01	3,91E-04	-4,11E-02
GWP-biogenic	-1,20E-05	7,63E-02	2,09E-07	-2,84E-06	0,00E+00	0,00E+00	1,15E-01	6,28E-04	3,77E-05	6,89E-04
GWP-luluc	2,61E-05	-1,51E-03	2,82E-07	-3,83E-06	0,00E+00	0,00E+00	4,49E-02	2,46E-04	1,64E-07	-1,94E-05
ODP	1,74E-10	2,99E-06	1,25E-11	-1,70E-10	0,00E+00	0,00E+00	3,43E-07	1,87E-09	7,06E-12	-8,40E-10
AP	1,11E-03	-2,46E-01	2,37E-06	-3,22E-05	0,00E+00	0,00E+00	1,03E-01	5,64E-04	1,39E-06	-1,65E-04
EP-freshwater	4,56E-06	-9,19E-04	4,61E-09	-6,26E-08	0,00E+00	0,00E+00	1,78E-03	9,72E-06	2,73E-09	-3,23E-07
EP-marine	5,60E-05	-1,00E-02	8,96E-07	-1,22E-05	0,00E+00	0,00E+00	1,30E-02	7,08E-05	6,25E-07	-6,37E-05
EP-terrestrial	7,69E-04	-1,49E-01	9,64E-06	-1,31E-04	0,00E+00	0,00E+00	1,51E-01	8,25E-04	5,65E-06	-6,71E-04
POCP	1,95E-04	-3,82E-02	2,39E-06	-3,24E-05	0,00E+00	0,00E+00	3,86E-02	2,11E-04	1,42E-06	-1,66E-04
ADPE	1,39E-05	-2,88E-03	1,85E-09	-2,51E-08	0,00E+00	0,00E+00	2,18E-04	1,19E-06	1,02E-09	-1,21E-07
ADPF	2,62E-01	-3,15E+01	8,16E-03	-1,11E-01	0,00E+00	0,00E+00	4,09E+02	2,24E+00	4,73E-03	-5,62E-01
WDP	2,66E-02	5,63E+00	3,25E-05	-4,42E-04	0,00E+00	0,00E+00	4,65E+00	2,54E-02	3,46E-05	-4,11E-03
CRU	0,00E+00	3,13E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MER	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PM	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
IRP	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRE	5,61E-01	-1,09E+02	3,39E-02	-7,04E+00	0,00E+00	0,00E+00	5,23E+02	-6,49E+00	1,51E-02	-3,36E+00
PENRM	2,45E-04	2,80E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	5,61E-01	-1,06E+02	3,39E-02	-7,04E+00	0,00E+00	0,00E+00	5,23E+02	-6,49E+00	1,51E-02	-3,36E+00
PERE	-3,35E-02	1,34E+01	1,27E-04	-1,72E-03	0,00E+00	0,00E+00	9,18E+01	5,02E-01	7,49E-05	-8,82E-03
PERM	8,15E-02	-2,04E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	4,80E-02	-6,94E+00	1,27E-04	-1,72E-03	0,00E+00	0,00E+00	9,18E+01	5,02E-01	7,49E-05	-8,82E-03
PE	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SM	0,00E+00	0,00E+00	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	0,00E+00	0,00E+00	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	0,00E+00	0,00E+00	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	6,19E-04	1,31E-01	9,20E-07	-1,25E-05	0,00E+00	0,00E+00	3,30E-01	1,80E-03	8,96E-07	-1,06E-04
HWD	0,00E+00	2,11E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NHWD	0,00E+00	2,30E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RWD	0,00E+00	2,01E-06	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
ETP-fw	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP-c	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP-nc	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
SQP	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
BCProd	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
BCPack	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF202001R0160	F202 AC-16/0.01	252	0,068
2CSF202001R1250	F202 AC-25/0.03	252	0,045
2CSF202001R1400	F202 AC-40/0.03	252	0,108
2CSF202001R1630	F202 AC-63/0.03	252	0,144
2CSF202001R2250	F202 AC-25/0.1	252	0,045
2CSF202001R2400	F202 AC-40/0.1	252	0,108
2CSF202001R2630	F202 AC-63/0.1	252	0,144
2CSF202001R3250	F202 AC-25/0.3	252	0,045
2CSF202001R3400	F202 AC-40/0.3	252	0,108
2CSF202001R3630	F202 AC-63/0.3	252	0,144
2CSF202001R4250	F202 AC-25/0.5	252	0,045
2CSF202001R4400	F202 AC-40/0.5	252	0,108
2CSF202001R0250	F202 AC-25/0.01	252	0,045
2CSF202001R4630	F202 AC-63/0.5	252	0,144
2CSF202005R0160	F202 AC-16/0.01 IEC	252	0,068
2CSF202005R1250	F202 AC-25/0.03 IEC	252	0,045
2CSF202005R3250	F202 AC-25/0.3 IEC	252	0,045
2CSF202005R1400	F202 AC-40/0.03 IEC	252	0,108
2CSF202005R3400	F202 AC-40/0.3 IEC	252	0,108
2CSF202005R1630	F202 AC-63/0.03 IEC	252	0,144
2CSF202005R3630	F202 AC-63/0.3 IEC	252	0,144
2CSF202005R2250	F202 AC-25/0.1 IEC	252	0,045
2CSF202005R4250	F202 AC-25/0.5 IEC	252	0,045
2CSF202005R2400	F202 AC-40/0.1 IEC	252	0,108
2CSF202011R1630	F202 AC-63/0.03	252	0,144
2CSF202005R4400	F202 AC-40/0.5 IEC	252	0,108
2CSF202005R2630	F202 AC-63/0.1 IEC	252	0,144
2CSF202011R3630	F202 AC-63/0.3	252	0,144
2CSF202005R4630	F202 AC-63/0.5 IEC	252	0,144
2CSF202011R0160	F202 AC-16/0.01	252	0,068
2CSF202101R0160	F202 A-16/0.01	252	0,068
2CSF202011R1250	F202 AC-25/0.03	252	0,045
2CSF202101R1250	F202 A-25/0.03	252	0,045
2CSF202011R3250	F202 AC-25/0.3	252	0,045
2CSF202011R1400	F202 AC-40/0.03	252	0,108
2CSF202101R1400	F202 A-40/0.03	252	0,108
2CSF202011R3400	F202 AC-40/0.3	252	0,108
2CSF202101R1630	F202 A-63/0.03	252	0,144
2CSF202101R4400	F202 A-40/0.5	252	0,108
2CSF202001U1250	F202 AC-25/0.03 U	252	0,045
2CSF202101R2250	F202 A-25/0.1	252	0,045
2CSF202001U1400	F202 AC-40/0.03 U	252	0,108

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF202101R4630	F202 A-63/0.5	252	0,144
2CSF202001U1630	F202 AC-63/0.03 U	252	0,144
2CSF202101R2400	F202 A-40/0.1	252	0,108
2CSF202101R2630	F202 A-63/0.1	252	0,144
2CSF202101R3250	F202 A-25/0.3	252	0,045
2CSF202121R1250	F202 A-25/0.03 CEBEC	252	0,045
2CSF202101R3400	F202 A-40/0.3	252	0,108
2CSF202121R1400	F202 A-40/0.03 CEBEC	252	0,108
2CSF202005U1400	F202 AC-40/0.03 U IEC	252	0,108
2CSF202101R3630	F202 A-63/0.3	252	0,144
2CSF202005U1630	F202 AC-63/0.03 U IEC	252	0,144
2CSF202121R1630	F202 A-63/0.03 CEBEC	252	0,144
2CSF202101R4250	F202 A-25/0.5	252	0,045
2CSF202005U2400	F202 AC-40/0.1 U IEC	252	0,108
2CSF202121R3250	F202 A-25/0.3 CEBEC	252	0,045
2CSF202005U2630	F202 AC-63/0.1 U IEC	252	0,144
2CSF202121R3400	F202 A-40/0.3 CEBEC	252	0,108
2CSF202005U3400	F202 AC-40/0.3 U IEC	252	0,108
2CSF202121R3630	F202 A-63/0.3 CEBEC	252	0,144
2CSF202005U3630	F202 AC-63/0.3 U IEC	252	0,144
2CSF202101U1250	F202 A-25/0.03 U	252	0,045
2CSF202101U1400	F202 A-40/0.03 U	252	0,108
2CSF202101U1630	F202 A-63/0.03 U	252	0,144
2CSF202401R1250	F202 A-25/0.03 AP-R	252	0,045
2CSF202201R2400	F202 A S-40/0.1	252	0,108
2CSF202401R1400	F202 A-40/0.03 AP-R	252	0,108
2CSF202201R2630	F202 A S-63/0.1	252	0,144
2CSF202401R1630	F202 A-63/0.03 AP-R	252	0,144
2CSF202201R3400	F202 A S-40/0.3	252	0,108
2CSF202201R3630	F202 A S-63/0.3	252	0,144
2CSF202201R4400	F202 A S-40/0.5	252	0,108
2CSF202319R1400	F202 AC-40/0.03 G	252	0,108
2CSF202201R4630	F202 A S-63/0.5	252	0,144
2CSF202319R1630	F202 AC-63/0.03 G	252	0,144
2CSF202201R5400	F202 A S-40/1	252	0,108
2CSF202319R2400	F202 AC-40/0.1 G	252	0,108
2CSF202201R5630	F202 A S-63/1	252	0,144
2CSF202319R2630	F202 AC-63/0.1 G	252	0,144
2CSF202419R1400	F202 A-40/0.03 G	252	0,108
2CSF202419R1630	F202 A-63/0.03 G	252	0,144
2CSF202419R2400	F202 A-40/0.1 G	252	0,108

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF202419R2630	F202 A-63/0.1 G	252	0,144
2CSF202196R1630	F202 A-63/0.03 16-2/3Hz	252	0,144
2CSF202196R3630	F202 A-63/0.3 16-2/3Hz	252	0,144
2CSF202196R4630	F202 A-63/0.5 16-2/3Hz	252	0,144
2CSF202199R1250	F202 A-25/0.03 110V	252	0,045
2CSF202199R1400	F202 A-40/0.03 110V	252	0,108
2CSF202199R1630	F202 A-63/0.03 110V	252	0,144
2CSF202325R1250	F202 F-25/0.03	252	0,045
2CSF202325R1400	F202 F-40/0.03	252	0,108
2CSF202325R1630	F202 F-63/0.03	252	0,144
2CSF202301R1250	F202 AC-25/0.03 AP-R	252	0,045
2CSF202301R1400	F202 AC-40/0.03 AP-R	252	0,108
2CSF202301R1630	F202 AC-63/0.03 AP-R	252	0,144
2CSF202165R1250	FX202 A-25/0.03	233	0,041
2CSF202165R1400	FX202 A-40/0.03	233	0,101
2CSF204001R1250	F204 AC-25/0.03	408	0,088
2CSF204001R1400	F204 AC-40/0.03	408	0,216
2CSF204001R2250	F204 AC-25/0.1	408	0,088
2CSF204001R1630	F204 AC-63/0.03	408	0,297
2CSF204001R2400	F204 AC-40/0.1	408	0,216
2CSF204001R2630	F204 AC-63/0.1	408	0,297
2CSF204001R3250	F204 AC-25/0.3	408	0,088
2CSF204001R3400	F204 AC-40/0.3	408	0,216
2CSF204005R1250	F204 AC-25/0.03 IEC	408	0,088
2CSF204001R3630	F204 AC-63/0.3	408	0,297
2CSF204001R4250	F204 AC-25/0.5	408	0,088
2CSF204005R1400	F204 AC-40/0.03 IEC	408	0,216
2CSF204001R4400	F204 AC-40/0.5	408	0,216
2CSF204005R1630	F204 AC-63/0.03 IEC	408	0,297
2CSF204001R4630	F204 AC-63/0.5	408	0,297
2CSF204023R1250	F204 AC-25/0.03-L	408	0,088
2CSF204005R2250	F204 AC-25/0.1 IEC	408	0,088
2CSF204005R2400	F204 AC-40/0.1 IEC	408	0,216
2CSF204005R2630	F204 AC-63/0.1 IEC	408	0,297
2CSF204005R3250	F204 AC-25/0.3 IEC	408	0,088
2CSF204005R3400	F204 AC-40/0.3 IEC	408	0,216
2CSF204005R3630	F204 AC-63/0.3 IEC	408	0,297
2CSF204005R4250	F204 AC-25/0.5 IEC	408	0,088
2CSF204005U2630	F204 AC-63/0.1 U IEC	408	0,297
2CSF204005R4400	F204 AC-40/0.5 IEC	408	0,216
2CSF204005R4630	F204 AC-63/0.5 IEC	408	0,297

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF204005U3400	F204 AC-40/0.3 U IEC	408	0,216
2CSF204023R1400	F204 AC-40/0.03-L	408	0,216
2CSF204005U3630	F204 AC-63/0.3 U IEC	408	0,297
2CSF204001U1250	F204 AC-25/0.03 U	408	0,088
2CSF204023R1630	F204 AC-63/0.03-L	408	0,297
2CSF204001U1400	F204 AC-40/0.03 U	408	0,216
2CSF204023R2250	F204 AC-25/0.1-L	408	0,088
2CSF204001U1630	F204 AC-63/0.03 U	408	0,297
2CSF204011R1630	F204 AC-63/0.03	408	0,297
2CSF204101R1250	F204 A-25/0.03	408	0,088
2CSF204023R2400	F204 AC-40/0.1-L	408	0,216
2CSF204011R3630	F204 AC-63/0.3	408	0,297
2CSF204101R1400	F204 A-40/0.03	408	0,216
2CSF204023R2630	F204 AC-63/0.1-L	408	0,297
2CSF204011R1250	F204 AC-25/0.03	408	0,088
2CSF204023R3250	F204 AC-25/0.3-L	408	0,088
2CSF204101R1630	F204 A-63/0.03	408	0,297
2CSF204011R3250	F204 AC-25/0.3	408	0,088
2CSF204005U1400	F204 AC-40/0.03 U IEC	408	0,216
2CSF204101R2250	F204 A-25/0.1	408	0,088
2CSF204005U1630	F204 AC-63/0.03 U IEC	408	0,297
2CSF204023R3400	F204 AC-40/0.3-L	408	0,216
2CSF204101R2400	F204 A-40/0.1	408	0,216
2CSF204023R3630	F204 AC-63/0.3-L	408	0,297
2CSF204101R2630	F204 A-63/0.1	408	0,297
2CSF204005U2400	F204 AC-40/0.1 U IEC	408	0,216
2CSF204023R4250	F204 AC-25/0.5-L	408	0,088
2CSF204011R1400	F204 AC-40/0.03	408	0,216
2CSF204101R3250	F204 A-25/0.3	408	0,088
2CSF204011R3400	F204 AC-40/0.3	408	0,216
2CSF204101R3400	F204 A-40/0.3	408	0,216
2CSF204023R4400	F204 AC-40/0.5-L	408	0,216
2CSF204023R4630	F204 AC-63/0.5-L	408	0,297
2CSF204101R3630	F204 A-63/0.3	408	0,297
2CSF204101R4250	F204 A-25/0.5	408	0,088
2CSF204101R4400	F204 A-40/0.5	408	0,216
2CSF204101R4630	F204 A-63/0.5	408	0,297
2CSF204201R2400	F204 A S-40/0.1	408	0,216
2CSF204201R2630	F204 A S-63/0.1	408	0,297
2CSF204201R5400	F204 A S-40/1	408	0,216
2CSF204201R3400	F204 A S-40/0.3	408	0,216
2CSF204201R5630	F204 A S-63/1	408	0,297

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF204401R1250	F204 A-25/0.03 AP-R	408	0,088
2CSF204123R1250	F204 A-25/0.03-L	408	0,088
2CSF204201R3630	F204 A S-63/0.3	408	0,297
2CSF204401R1400	F204 A-40/0.03 AP-R	408	0,216
2CSF204123R1400	F204 A-40/0.03-L	408	0,216
2CSF204201R4400	F204 A S-40/0.5	408	0,216
2CSF204401R1630	F204 A-63/0.03 AP-R	408	0,297
2CSF204123R1630	F204 A-63/0.03-L	408	0,297
2CSF204201R4630	F204 A S-63/0.5	408	0,297
2CSF204123R2250	F204 A-25/0.1-L	408	0,088
2CSF204123R2400	F204 A-40/0.1-L	408	0,216
2CSF204121R1250	F204 A-25/0.03 CEBEC	408	0,088
2CSF204123R2630	F204 A-63/0.1-L	408	0,297
2CSF204197R1250	F204 A-25/0.03 400Hz	408	0,088
2CSF204123R3250	F204 A-25/0.3-L	408	0,088
2CSF204197R1400	F204 A-40/0.03 400Hz	408	0,216
2CSF204123R3400	F204 A-40/0.3-L	408	0,216
2CSF204101U1250	F204 A-25/0.03 U	408	0,088
2CSF204101U1400	F204 A-40/0.03 U	408	0,216
2CSF204123R3630	F204 A-63/0.3-L	408	0,297
2CSF204101U1630	F204 A-63/0.03 U	408	0,297
2CSF204123R4250	F204 A-25/0.5-L	408	0,088
2CSF204123R4400	F204 A-40/0.5-L	408	0,216
2CSF204123R4630	F204 A-63/0.5-L	408	0,297
2CSF204319R1400	F204 AC-40/0.03 G	408	0,216
2CSF204419R1400	F204 A-40/0.03 G	408	0,216
2CSF204196R1630	F204 A-63/0.03 16-2/3Hz	408	0,297
2CSF204319R1630	F204 AC-63/0.03 G	408	0,297
2CSF204419R1630	F204 A-63/0.03 G	408	0,297
2CSF204196R3630	F204 A-63/0.3 16-2/3Hz	408	0,297
2CSF204319R2400	F204 AC-40/0.1 G	408	0,216
2CSF204419R2400	F204 A-40/0.1 G	408	0,216
2CSF204319R2630	F204 AC-63/0.1 G	408	0,297
2CSF204196R4630	F204 A-63/0.5 16-2/3Hz	408	0,297
2CSF204219R2400	F204 A S-40/0.1 T	408	0,216
2CSF204419R2630	F204 A-63/0.1 G	408	0,297
2CSF204219R2630	F204 A S-63/0.1 T	408	0,297
2CSF204519R1400	F204 AC-40/0.03 T	408	0,216
2CSF204199R1250	F204 A-25/0.03 110V	408	0,088
2CSF204219R3400	F204 A S-40/0.3 T	408	0,216
2CSF204519R1630	F204 AC-63/0.03 T	408	0,297
2CSF204199R1400	F204 A-40/0.03 110V	408	0,216

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF204219R3630	F204 A S-63/0.3 T	408	0,297
2CSF204199R1630	F204 A-63/0.03 110V	408	0,297
2CSF204325R1250	F204 F-25/0.03	408	0,088
2CSF204519R2400	F204 AC-40/0.1 T	408	0,216
2CSF204719R1400	F204 A-40/0.03 T	408	0,216
2CSF204519R2630	F204 AC-63/0.1 T	408	0,297
2CSF204325R1400	F204 F-40/0.03	408	0,216
2CSF204121R1400	F204 A-40/0.03 CEBEC	408	0,216
2CSF204719R1630	F204 A-63/0.03 T	408	0,297
2CSF204325R1630	F204 F-63/0.03	408	0,297
2CSF204121R1630	F204 A-63/0.03 CEBEC	408	0,297
2CSF204719R2400	F204 A-40/0.1 T	408	0,216
2CSF204719R2630	F204 A-63/0.1 T	408	0,297
2CSF204121R3250	F204 A-25/0.3 CEBEC	408	0,088
2CSF204619R1400	F204 AC-40/0.03 TG	408	0,216
2CSF204121R3400	F204 A-40/0.3 CEBEC	408	0,216
2CSF204301R1250	F204 AC-25/0.03 AP-R	408	0,088
2CSF204619R1630	F204 AC-63/0.03 TG	408	0,297
2CSF204121R3630	F204 A-63/0.3 CEBEC	408	0,297
2CSF204619R2400	F204 AC-40/0.1 TG	408	0,216
2CSF204165R1250	FX204 A-25/0.03	385	0,059
2CSF204619R2630	F204 AC-63/0.1 TG	408	0,297
2CSF204165R1400	FX204 A-40/0.03	385	0,161
2CSF204123U1400	F204A-40/0.03L U	408	0,216
2CSF204819R1400	F204 A-40/0.03 TG	408	0,216
2CSF204819R1630	F204 A-63/0.03 TG	408	0,297
2CSF204819R2400	F204 A-40/0.1 TG	408	0,216
2CSF204819R2630	F204 A-63/0.1 TG	408	0,297
2CSF702157R0160	VYA216/010	243	0,032
2CSF702157R1250	VYA225/030	243	0,050
2CSF704157R1250	VYA425/030	393	0,128
2CSF704157R3250	VYA425/300	393	0,128
2CSF702157R3250	VYA225/300	243	0,050
2CSF702157R1400	VYA240/030	243	0,080
2CSF704957R1400	VYA440/030PN	393	0,204
2CSF704157R1400	VYA440/030	393	0,204
2CSF704157R3400	VYA440/300	393	0,204
2CSF702157R3400	VYA240/300	243	0,080
2CSF702157R1630	VYA263/030	243	0,182
2CSF704157R1630	VYA463/030	393	0,337
2CSF704157R3630	VYA463/300	393	0,337
2CSF702157R3630	VYA263/300	243	0,182

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF704257R3400	VYS440/300	393	0,204
2CSF702257R3400	VYS240/300	243	0,080
2CSF704257R3630	VYS463/300	393	0,337
2CSF702257R3630	VYS263/300	243	0,182
2CSF704957R1630	VYA463/030PN	393	0,337
2CSF202001R1800	F202 AC-80/0.03	271	0,203
2CSF202001R1900	F202 AC-100/0.03	271	0,293
2CSF202001R2800	F202 AC-80/0.1	271	0,203
2CSF202001R2900	F202 AC-100/0.1	271	0,293
2CSF202001R3800	F202 AC-80/0.3	271	0,203
2CSF202001R3900	F202 AC-100/0.3	271	0,293
2CSF202001R4800	F202 AC-80/0.5	271	0,203
2CSF202001R4900	F202 AC-100/0.5	271	0,293
2CSF202005R2900	F202 AC-100/0.1 IEC	271	0,293
2CSF202005R1800	F202 AC-80/0.03 IEC	271	0,203
2CSF202005R3800	F202 AC-80/0.3 IEC	271	0,203
2CSF202005R1900	F202 AC-100/0.03 IEC	271	0,293
2CSF202005R3900	F202 AC-100/0.3 IEC	271	0,293
2CSF202005R2800	F202 AC-80/0.1 IEC	271	0,203
2CSF202005R4800	F202 AC-80/0.5 IEC	271	0,203
2CSF202005R4900	F202 AC-100/0.5 IEC	271	0,293
2CSF202101R4800	F202 A-80/0.5	271	0,203
2CSF202001U1800	F202 AC-80/0.03 U	271	0,203
2CSF202101R4900	F202 A-100/0.5	271	0,293
2CSF202001U1900	F202 AC-100/0.03 U	271	0,293
2CSF202101R1800	F202 A-80/0.03	271	0,203
2CSF202101R1900	F202 A-100/0.03	271	0,293
2CSF202101R2800	F202 A-80/0.1	271	0,203
2CSF202101R2900	F202 A-100/0.1	271	0,293
2CSF202101R3800	F202 A-80/0.3	271	0,203
2CSF202101R3900	F202 A-100/0.3	271	0,293
2CSF202401R1800	F202 A-80/0.03 AP-R	271	0,203
2CSF202401R1900	F202 A-100/0.03 AP-R	271	0,293
2CSF202201R2900	F202 A S-100/0.1	271	0,293
2CSF202201R3900	F202 A S-100/0.3	271	0,293
2CSF202201R4900	F202 A S-100/0.5	271	0,293
2CSF202201R5900	F202 A S-100/1	271	0,293
2CSF202199R1800	F202 A-80/0.03 110V	271	0,203
2CSF202199R1100	F202 A-100/0.03 110V	271	0,293
2CSF204005R1800	F204 AC-80/0.03 IEC	428	0,358
2CSF204005R1900	F204 AC-100/0.03 IEC	428	0,554
2CSF204001R1800	F204 AC-80/0.03	428	0,358

Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSF204001R1900	F204 AC-100/0.03	428	0,554
2CSF204001R2800	F204 AC-80/0.1	428	0,358
2CSF204005R2800	F204 AC-80/0.1 IEC	428	0,358
2CSF204005R2900	F204 AC-100/0.1 IEC	428	0,554
2CSF204001R2900	F204 AC-100/0.1	428	0,554
2CSF204001R3800	F204 AC-80/0.3	428	0,358
2CSF204001R3900	F204 AC-100/0.3	428	0,554
2CSF204005R3800	F204 AC-80/0.3 IEC	428	0,358
2CSF204005R3900	F204 AC-100/0.3 IEC	428	0,554
2CSF204001R4800	F204 AC-80/0.5	428	0,358
2CSF204001R4900	F204 AC-100/0.5	428	0,554
2CSF204005R4800	F204 AC-80/0.5 IEC	428	0,358
2CSF204005R4900	F204 AC-100/0.5 IEC	428	0,554
2CSF204023R1800	F204 AC-80/0.03-L	428	0,358
2CSF204101R1800	F204 A-80/0.03	428	0,358
2CSF204101R1900	F204 A-100/0.03	428	0,554
2CSF204023R1900	F204 AC-100/0.03-L	428	0,554
2CSF204023R3800	F204 AC-80/0.3-L	428	0,358
2CSF204101R2800	F204 A-80/0.1	428	0,358
2CSF204023R3900	F204 AC-100/0.3-L	428	0,358
2CSF204101R2900	F204 A-100/0.1	428	0,554
2CSF204101R3800	F204 A-80/0.3	428	0,358
2CSF204101R3900	F204 A-100/0.3	428	0,554
2CSF204101R4800	F204 A-80/0.5	428	0,358
2CSF204101R4900	F204 A-100/0.5	428	0,554
2CSF204201R5900	F204 A S-100/1	428	0,554
2CSF204201R2900	F204 A S-100/0.1	428	0,554
2CSF204401R1800	F204 A-80/0.03 AP-R	428	0,358
2CSF204201R3900	F204 A S-100/0.3	428	0,554
2CSF204401R1900	F204 A-100/0.03 AP-R	428	0,554
2CSF204201R4900	F204 A S-100/0.5	428	0,554
2CSF204123R1800	F204 A-80/0.03-L	428	0,358
2CSF204123R1900	F204 A-100/0.03-L	428	0,554
2CSF204123R3800	F204 A-80/0.3-L	428	0,358
2CSF204123R3900	F204 A-100/0.3-L	428	0,554
2CSF204199R1800	F204 A-80/0.03 110V	428	0,358
2CSF204199R1100	F204 A-100/0.03 110V	428	0,554
2CSF202365R1250	FX202 F-25/0.03	183	0,041
2CSF202365R1400	FX202 F-40/0.03	183	0,101
2CSF204365R1250	FX204 F-25/0.03	322	0,059
2CSF204365R1400	FX204 F-40/0.03	322	0,161
2CSF202465R1250	FX202 A-25/0.03 G	183	0,041

Extrapolation Factors

[illegible]

Glossary

Environmental impact Indicators			
GWP-total	Global Warming Potential total (Climate change)		
GWP-fossil	Global Warming Potential fossil		
GWP-biogenic	Global Warming Potential biogenic		
GWP-luluc	Global Warming Potential land use and land use change		
ODP	Depletion potential of the stratospheric ozone layer		
AP	Acidification potential		
EP-freshwater	Eutrophication potential - freshwater compartment		
EP-marine	Eutrophication potential - fraction of nutrients reachin marine end compartment		
EP-terrestrial	Eutrophication potential - Accumulated Exceedance		
POPCD	Formation potential of tropospheric ozone		
ADP-m&m	Abiotic Depletion for non-fossil resources potential		
ADP-fossil	Abiotic Depletion for fossil resources potential, WDP		
WDP	Water deprivation potential		
Resource indicators			
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw		
PENRM	Use of non-renewable primary energy resources used as raw material		
PENRT	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials		
PERE	Use of renewable primary energy excluding non-renewable primary energy resources used as raw material.		
PERM	Use of renewable primary energy resources used as raw material		
PERT	Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)		
Secondary materials, water and energy resources		Waste category indicators	
SM	Use of secondary materials	HWD	Hazardous waste disposed
RSF	Use of renewable secondary fuels	N-HWD	Non-hazardous waste disposed
NRSF	Use of non-renewable secondary fuels	RWD	Radioactive waste disposed
FW	Net use of fresh water		
Output flow indicators			
CfRu	Components for re-use		
MfR	Materials for recycling		
MfER	Materials for energy recovery		
EE	Exported Energy		

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