

DSX301C Residual Current Circuit Breaker with Overcurrent Protection

# PEP ecopassport®

## Product Environmental Profile



Registration number:	ABBG-00214-V01.06-EN	Drafting rules:	PCR-ed4-EN-2021 09 06
Contact information:	EPD_ELSB@abb.com	Supplemented by:	PSR-0005-ed2-EN-2016 03 29
Verifier accreditation number:	VH42	Information and reference documents:	www.pep-ecopassport.org
Date of issue:	August-23	Validity period:	5 years
<b>Independent verification of the declaration and data in compliance with ISO 14025:2006</b>			
Internal:	<input type="checkbox"/>	External:	<input checked="" type="checkbox"/>
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 content of this PEP cannot be compared with the content based on another program/database.

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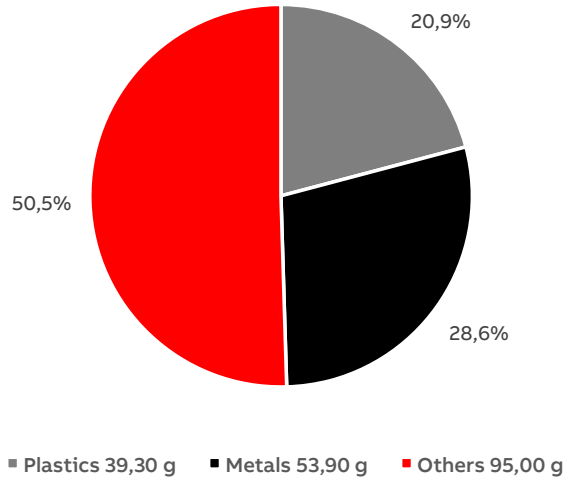


## General information

Reference product	ABB DSX301C B16 A30 - code 2CSR255165R1165
Description of the product	The DSX301C Type A are universal current-sensitive residual current circuit breakers RCCBs designed for industrial applications where there is increasing use of devices like frequency converters, medical equipment and product systems. The RCCB Type A protect faults occurred due to smooth DC residual currents or currents with low residual ripple which are common in the above applications.
Functional unit	The functional unit for the DSX301C Type A is "Protect during 20 years the installation against overloads and short-circuits and people and premises at risk of fire or explosion against insulation defects in circuit with assigned voltage 230 V and rated current 16A.
Other products covered	DSX301C homogeneous family Rated voltage [V]: 230 Rated current [A]: 6/10/13/16/20 Tripping Curve: B/C Rated breaking capacity [A]: 6 kA, 10kA Type of differential protection: A/AC/F/G
Manufacturing address	ABB S.p.A. – ELSB Viale dell'Industria, 18 20009 Vittuone (MI) - Italy <a href="http://www.new.abb.com">www.new.abb.com</a>



# Constituent Materials



Total weight of reference product and packaging **188,2 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%
PA 66	17,3	STEEL	12,2	WOOD	33,2
PC	1,8	COPPER	9,6	CARDBOARD	7,9
PET	1,0	ALUMINIUM	2,8	GF	5,9
PA6	0,9	IRON	2,2	PAPER	0,9
		OTHER METALS	1,9	OTHER METALS	2,6

Total weight of the reference product 109,1 g plus packaging 79,1g



## Additional Information

<b>Manufacturing</b>	Includes the environmental impacts associated with extraction and processing of the raw materials used to produce and assembly the product and its packaging, distribution to the manufacturer's last logistic platform.
<b>Distribution</b>	Includes the transportation in its packaging from the manufacturer's last logistic platform to the distributor.
<b>Installation</b>	Installation stage includes the installation of the products made manually and waste treatment of discarded materials.
<b>Use</b>	Energy consumption is calculated by following the PSR. The energy models used in this phase are the specific energy mixes based on ABB distribution. No maintenance is necessary.
<b>End of life</b>	Includes its removal, dismantling and transportation of the dismantled product to the treatment site and the treatment process. A value of 1000 km transport by lorry is used for the transportation.
<b>Benefits and loads beyond the system boundaries</b>	N/A



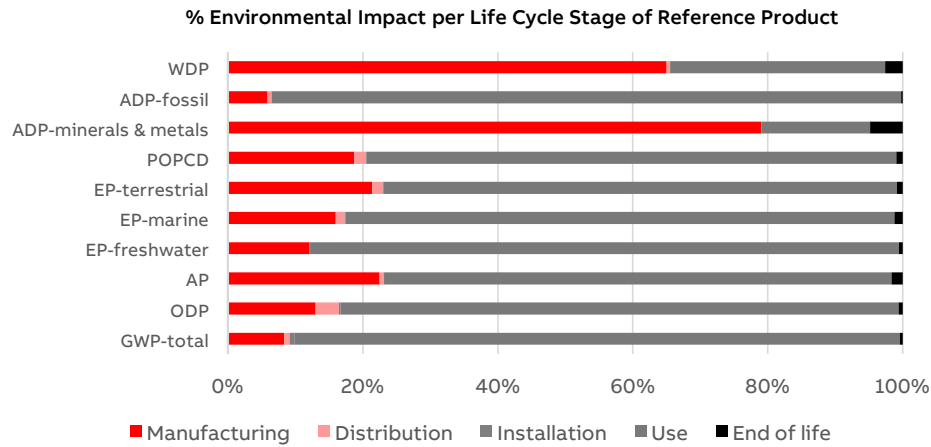
# Environmental Impacts

Reference lifetime	20 years
Product category	Differential Circuit Breaker
Installation elements	Installation carried out manually. End of life of packaging.
Use scenario	Load time: 50% of rated current in continuous operation (In). Use time rate: 30% of reference lifetime (RLT).
Geographical representativeness	Europe
Technological representativeness	Materials and processes data are specific for the production of DSX301C B16 A30 - 2CSR255165R1165 and its family
Software and database used	Simapro 9.4.0.2 and Ecoinvent v3.8

## Energy model used

Manufacturing	Electricity, medium voltage [IT] market for   Cut-off, System_GO energy mix_ei 3.8 System
Installation	Manually done. Europe
Use	Electricity, low voltage [RER] market group for   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

## Common base of mandatory indicators



### Environmental impact indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits	
GWP	Total	kg CO2 eq.	1,65E+01	1,38E+00	1,28E-01	1,26E-01	1,48E+01	7,18E-02	-5,94E-02
	Fossil	kg CO2 eq.	1,59E+01	1,38E+00	1,28E-01	8,79E-03	1,43E+01	6,93E-02	-5,99E-02
	Biogenic	kg CO2 eq.	5,84E-01	2,97E-03	1,19E-04	1,17E-01	4,61E-01	2,50E-03	5,85E-04
	Luluc	kg CO2 eq.	3,62E-02	2,30E-03	5,02E-05	3,50E-06	3,38E-02	7,16E-05	-9,66E-05
ODP		kg CFC-11 eq.	8,70E-07	1,13E-07	3,01E-08	2,00E-09	7,20E-07	5,28E-09	-5,17E-09
AP		H+ eq.	1,08E-01	2,43E-02	6,51E-04	5,15E-05	8,13E-02	1,78E-03	-2,63E-04
EP	Freshwater	kg P eq.	1,65E-02	2,00E-03	8,29E-06	8,98E-07	1,44E-02	9,32E-05	-2,17E-06
	Marine	kg N eq.	1,67E-02	2,67E-03	2,24E-04	2,93E-05	1,36E-02	2,07E-04	-5,13E-05
	Terrestrial	mol N eq.	1,56E-01	3,35E-02	2,45E-03	2,03E-04	1,19E-01	1,32E-03	-5,16E-04
POPCD		kg NMVOC eq.	4,18E-02	7,84E-03	7,03E-04	6,10E-05	3,28E-02	3,99E-04	-2,39E-04
ADP	Minerals & metals	kg SB eq.	8,34E-04	6,59E-04	4,26E-07	2,49E-08	1,34E-04	4,02E-05	-4,56E-07
	Fossil	MJ	3,26E+02	1,91E+01	1,97E+00	1,36E-01	3,04E+02	8,08E-01	-1,29E+00
WDP		m³ eq. depr.	1,78E+00	1,16E+00	8,20E-03	7,56E-04	5,69E-01	4,65E-02	-3,34E-02

### Resource use indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
PERE	MJ	6,91E+01	6,29E+00	2,73E-02	2,81E-03	6,27E+01	1,25E-01	-7,98E-02
PERM	MJ	2,56E-01	2,56E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	6,94E+01	6,54E+00	2,73E-02	2,81E-03	6,27E+01	1,25E-01	-7,98E-02
PENRE	MJ	3,25E+02	1,79E+01	1,97E+00	1,36E-01	3,04E+02	8,07E-01	-1,29E+00
PENRM	MJ	1,23E+00	1,23E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,26E+02	1,91E+01	1,97E+00	1,36E-01	3,04E+02	8,07E-01	-1,29E+00

## 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	m <sup>3</sup>	2,96E-01	2,99E-02	2,22E-04	3,72E-05	2,65E-01	1,11E-03	-8,77E-04

### Waste category indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
HWD	kg	4,54E-04	2,04E-04	5,07E-06	3,20E-07	2,32E-04	1,23E-05	-1,91E-06
N-HWD	kg	1,59E+00	2,91E-01	1,14E-01	3,56E-02	1,06E+00	8,95E-02	-5,77E-03
RWD	kg	2,31E-03	5,14E-05	1,33E-05	9,06E-07	2,24E-03	4,41E-06	-1,40E-06

### Output flow indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
CfRu	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MfR	kg	1,40E-01	5,43E-02	0,00E+00	3,31E-02	0,00E+00	5,26E-02	0,00E+00
MfER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE	MJ	1,46E-01	0,00E+00	0,00E+00	1,11E-01	0,00E+00	3,54E-02	0,00E+00

### Other indicators

Indicator		Unit	Total
Biogenic Carbon	Product	kg of C	0,00E+00
	Packaging	kg of C	3,64E-02

### Optional indicators

Indicator	Unit	Total	Manufacturing	Distribution	Installation	Use	End of life	Benefits
Tot PE	MJ	3,96E+02	2,57E+01	1,99E+00	1,38E-01	3,67E+02	9,33E-01	0,00E+00
Efp	Dise inc	3,99E-07	1,20E-07	1,21E-08	1,07E-09	2,59E-07	6,45E-09	0,00E+00
IrHH	kBq U-235 eq	8,49E+00	1,38E-01	1,01E-02	7,86E-04	8,33E+00	1,11E-02	0,00E+00
ETX FW	CTUe	4,01E+02	1,96E+02	1,53E+00	1,26E-01	1,93E+02	1,01E+01	0,00E+00
HTX CE	CTUh	1,29E-08	5,74E-09	4,85E-11	1,02E-11	5,93E-09	1,22E-09	0,00E+00
HTX N-CE	CTUh	4,64E-07	2,40E-07	1,62E-09	1,42E-10	1,89E-07	3,31E-08	0,00E+00
IrLS	Pt	8,34E+01	2,58E+01	1,49E+00	1,50E-01	5,50E+01	9,29E-01	0,00E+00

# 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 multiplying the values of the Reference product by the following coefficients:

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

For use stage:  $y = a_n x_2 + b_n$  where  $x_2$  is the average Energy consumption calculated using this formula:  $X_2 = \text{Power\_loss} * 52,56$ .

Table below reports the linear coefficients an & bn for each life cycle stage.

The calculation of the coefficient for the Installation Stage was not performed because the selected parameters do not affect the values for this stage.

Impact Category	Manufacturing		Distribution		Installation		Use		End of Life	
	a1	b1	a2	b2	a3	b3	a4	b4	a5	b5
GWP-total	1,11E-02	1,75E-01	6,83E-04	5,40E-02	0,00E+00	1,26E-01	4,04E-01	1,86E-03	6,58E-04	-1,20E-05
GWP-fossil	1,10E-02	1,80E-01	6,82E-04	5,39E-02	0,00E+00	8,79E-03	3,90E-01	1,80E-03	6,35E-04	-1,16E-05
GWP-biogenic	8,21E-05	-5,99E-03	6,31E-07	4,99E-05	0,00E+00	1,17E-01	1,26E-02	5,81E-05	2,30E-05	-4,18E-07
GWP-luluc	1,75E-05	3,83E-04	2,67E-07	2,11E-05	0,00E+00	3,50E-06	9,22E-04	4,26E-06	6,56E-07	-1,20E-08
ODP	8,63E-10	1,84E-08	1,60E-10	1,26E-08	0,00E+00	2,00E-09	1,97E-08	9,08E-11	4,84E-11	-8,81E-13
AP	2,02E-04	2,28E-03	3,46E-06	2,73E-04	0,00E+00	5,15E-05	2,22E-03	1,03E-05	1,64E-05	-2,98E-07
EP-freshwater	1,74E-05	1,04E-04	4,41E-08	3,48E-06	0,00E+00	8,98E-07	3,93E-04	1,81E-06	8,54E-07	-1,56E-08
EP-marine	2,09E-05	3,87E-04	1,19E-06	9,40E-05	0,00E+00	2,93E-05	3,70E-04	1,71E-06	1,89E-06	-3,45E-08
EP-terrestrial	2,67E-04	4,31E-03	1,30E-05	1,03E-03	0,00E+00	2,03E-04	3,26E-03	1,51E-05	1,21E-05	-2,21E-07
POCP	6,10E-05	1,18E-03	3,74E-06	2,95E-04	0,00E+00	6,10E-05	8,96E-04	4,14E-06	3,66E-06	-6,66E-08
ADPE	5,75E-06	3,11E-05	2,27E-09	1,79E-07	0,00E+00	2,49E-08	3,67E-06	1,69E-08	3,69E-07	-6,72E-09
ADPF	1,48E-01	2,98E+00	1,04E-02	8,26E-01	0,00E+00	1,36E-01	8,31E+00	3,84E-02	7,40E-03	-1,35E-04
WDP	8,65E-03	2,27E-01	3,22E-05	2,55E-03	0,00E+00	5,64E-04	9,53E-02	4,40E-04	3,39E-04	-6,17E-06
CRU	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
MFR	8,52E-05	4,50E-02	0,00E+00	0,00E+00	0,00E+00	3,31E-02	0,00E+00	0,00E+00	4,82E-04	-8,78E-06
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	1,11E-01	0,00E+00	0,00E+00	3,25E-04	-5,91E-06
PM	9,43E-10	1,70E-08	6,41E-11	5,07E-09	0,00E+00	1,07E-09	7,08E-09	3,27E-11	5,91E-11	-1,08E-12
IRP	1,11E-03	1,75E-02	5,35E-05	4,23E-03	0,00E+00	7,86E-04	2,28E-01	1,05E-03	1,02E-04	-1,86E-06
PENRE	1,48E-01	1,75E+00	1,04E-02	8,26E-01	0,00E+00	1,36E-01	8,31E+00	3,84E-02	7,40E-03	-1,35E-04
PENRM	0,00E+00	1,23E+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	1,48E-01	2,98E+00	1,04E-02	8,26E-01	0,00E+00	1,36E-01	8,31E+00	3,84E-02	7,40E-03	-1,35E-04
PERE	2,12E-02	3,97E+00	1,45E-04	1,15E-02	0,00E+00	2,81E-03	1,71E+00	7,90E-03	1,15E-03	-2,09E-05
PERM	0,00E+00	2,56E-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	2,12E-02	4,22E+00	1,45E-04	1,15E-02	0,00E+00	2,81E-03	1,71E+00	7,90E-03	1,15E-03	-2,09E-05
PE	1,69E-01	7,20E+00	1,06E-02	8,37E-01	0,00E+00	1,38E-01	1,00E+01	4,63E-02	8,55E-03	-1,56E-04
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	2,26E-04	5,20E-03	1,18E-06	9,31E-05	0,00E+00	3,72E-05	7,22E-03	3,34E-05	1,02E-05	-1,86E-07
HWD	1,80E-06	7,23E-06	2,70E-08	2,13E-06	0,00E+00	3,20E-07	6,32E-06	2,92E-08	1,13E-07	-2,05E-09
NHWD	2,22E-03	4,86E-02	6,07E-04	4,80E-02	0,00E+00	3,56E-02	2,90E-02	1,34E-04	8,21E-04	-1,49E-05
RWD	4,00E-07	7,71E-06	7,06E-08	5,58E-06	0,00E+00	9,06E-07	6,11E-05	2,82E-07	4,05E-08	-7,37E-10
ETP-fw	1,68E+00	1,18E+01	8,15E-03	6,45E-01	0,00E+00	1,26E-01	5,26E+00	2,43E-02	9,22E-02	-1,68E-03
HTP-c	4,57E-11	7,50E-10	2,58E-13	2,04E-11	0,00E+00	1,02E-11	1,62E-10	7,47E-13	1,12E-11	-2,03E-13
HTP-nc	1,99E-09	2,32E-08	8,60E-12	6,80E-10	0,00E+00	1,42E-10	5,16E-09	2,38E-11	3,04E-10	-5,53E-12
SQP	7,95E-02	1,71E+01	7,93E-03	6,27E-01	0,00E+00	1,50E-01	1,50E+00	6,93E-03	8,51E-03	-1,55E-04
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]
2CSR255165R1065	DSX301C B6 A30	108,6	0,422
2CSR255165R1105	DSX301C B10 A30	108,5	0,480
2CSR255165R1135	DSX301C B13 A30	109,0	0,615
2CSR255165R1165	DSX301C B16 A30	109,1	0,697
2CSR255165R1205	DSX301C B20 A30	109,6	0,959
2CSR255165R1064	DSX301C C6 A30	108,6	0,422
2CSR255165R1104	DSX301C C10 A30	108,5	0,480
2CSR255165R1134	DSX301C C13 A30	109,0	0,615
2CSR255165R1164	DSX301C C16 A30	109,1	0,697
2CSR255165R1204	DSX301C C20 A30	109,6	0,959
2CSR245163R1164	DS301C L C16 A30	109,1	0,697
2CSR245163R1064	DS301C L C6 A30	108,6	0,422
2CSR245163R1104	DS301C L C10 A30	108,5	0,480
2CSR245163R1204	DS301C L C20 A30	109,6	0,959
2CSR255063R1205	DS301C B20 AC30	109,6	0,959
2CSR255063R1104	DS301C C10 AC30	108,5	0,480
2CSR255063R1105	DS301C B10 AC30	108,5	0,480
2CSR255063R1204	DS301C C20 AC30	109,6	0,959
2CSR255063R1065	DS301C B6 AC30	108,5	0,480
2CSR255063R1164	DS301C C16 AC30	109,1	0,697
2CSR255063R1165	DS301C B16 AC30	109,1	0,697
2CSR255063R1064	DS301C C6 AC30	108,6	0,422
2CSR255063U1134	DS301C C13 AC30	109,0	0,615
2CSR255063U1135	DS301C B13 AC30	109,0	0,615
2CSR255063R1135	DS301C B13 AC30	109,0	0,615
2CSR255063R1134	DS301C C13 AC30	109,0	0,615
2CSR255063U1165	DS301C B16 AC30	109,1	0,697
2CSR255063U1104	DS301C C10 AC30	108,5	0,480
2CSR255063U1105	DS301C B10 AC30	108,5	0,480
2CSR255063U1164	DS301C C16 AC30	109,1	0,697
2CSR255164R1134	DS301CT C13 A30	109,0	0,615
2CSR255164R1135	DS301CT B13 A30	109,0	0,615
2CSR255163R1205	DS301C B20 A30	109,6	0,959
2CSR255163R1105	DS301C B10 A30	108,5	0,480
2CSR255163R1204	DS301C C20 A30	109,6	0,959
2CSR255163R1104	DS301C C10 A30	108,5	0,480
2CSR255163R1065	DS301C B6 A30	108,6	0,422
2CSR255163R1165	DS301C B16 A30	109,1	0,697
2CSR255163R1064	DS301C C6 A30	108,6	0,422
2CSR255163R1164	DS301C C16 A30	109,1	0,697
2CSR255163U1134	DS301C C13 A30	109,0	0,615
2CSR255163U1135	DS301C B13 A30	109,0	0,615

## Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSR255164R1064	DS301CT C6 A30	108,6	0,422
2CSR255164R1065	DS301CT B6 A30	108,6	0,422
2CSR255164R1164	DS301CT C16 A30	109,1	0,697
2CSR255164R1165	DS301CT B16 A30	109,1	0,697
2CSR255163R1135	DS301C B13 A30	109,0	0,615
2CSR255163R1134	DS301C C13 A30	109,0	0,615
2CSR255164R1104	DS301CT C10 A30	108,5	0,480
2CSR255164R1105	DS301CT B10 A30	108,5	0,480
2CSR255164R1204	DS301CT C20 A30	109,6	0,959
2CSR255164R1205	DS301CT B20 A30	109,6	0,959
2CSR255165U1134	DSX301C C13 A30	109,0	0,615
2CSR255163U1105	DS301C B10 A30	108,5	0,480
2CSR255163U1104	DS301C C10 A30	108,5	0,480
2CSR255165U1165	DSX301C B16 A30	109,1	0,697
2CSR255163U1165	DS301C B16 A30	109,1	0,697
2CSR255165U1164	DSX301C C16 A30	109,1	0,697
2CSR255163U1164	DS301C C16 A30	109,1	0,697
2CSR255563R1065	DS301C B6 F30	108,6	0,422
2CSR255563R1105	DS301C B10 F30	108,5	0,480
2CSR255563R1135	DS301C B13 F30	109,0	0,615
2CSR255563R1165	DS301C B16 F30	109,1	0,697
2CSR255563R1205	DS301C B20 F30	109,6	0,959
2CSR255563R1064	DS301C C6 F30	108,6	0,422
2CSR255563R1104	DS301C C10 F30	108,5	0,480
2CSR255563R1134	DS301C C13 F30	109,0	0,615
2CSR255563R1164	DS301C C16 F30	109,1	0,697
2CSR255563R1204	DS301C C20 F30	109,6	0,959
2CSR255463R1065	DS301C B6 G30	108,6	0,422
2CSR255463R1105	DS301C B10 G30	108,5	0,480
2CSR255463R1135	DS301C B13 G30	109,0	0,615
2CSR255463R1165	DS301C B16 G30	109,1	0,697
2CSR255463R1205	DS301C B20 G30	109,6	0,959
2CSR255463R1064	DS301C C6 G30	108,6	0,422
2CSR255463R1104	DS301C C10 G30	108,5	0,480
2CSR255463R1134	DS301C C13 G30	109,0	0,615
2CSR255463R1164	DS301C C16 G30	109,1	0,697
2CSR255463R1204	DS301C C20 G30	109,6	0,959
2CSR245563R1065	DS301C L B6 F30	108,6	0,422
2CSR245563R1105	DS301C L B10 F30	108,5	0,480
2CSR245563R1135	DS301C L B13 F30	109,0	0,615
2CSR245563R1165	DS301C L B16 F30	109,1	0,697

## Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSR245563R1205	DS301C L B20 F30	109,6	0,959
2CSR245563R1064	DS301C L C6 F30	108,6	0,422
2CSR245563R1104	DS301C L C10 F30	108,5	0,480
2CSR245563R1134	DS301C L C13 F30	109,0	0,615
2CSR245563R1164	DS301C L C16 F30	109,1	0,697
2CSR245563R1204	DS301C L C20 F30	109,6	0,959
2CSR255465R1065	DSX301C B6 G30	108,6	0,422
2CSR255465R1105	DSX301C B10 G30	108,5	0,480
2CSR255465R1135	DSX301C B13 G30	109,0	0,615
2CSR255465R1165	DSX301C B16 G30	109,1	0,697
2CSR255465R1205	DSX301C B20 G30	109,6	0,959
2CSR255465R1064	DSX301C C6 G30	108,6	0,422
2CSR255465R1104	DSX301C C10 G30	108,5	0,480
2CSR255465R1134	DSX301C C13 G30	109,0	0,615
2CSR255465R1164	DSX301C C16 G30	109,1	0,697
2CSR255465R1204	DSX301C C20 G30	109,6	0,959
2CSR255565R1065	DSX301C B6 F30	108,6	0,422
2CSR255565R1105	DSX301C B10 F30	108,5	0,480
2CSR255565R1135	DSX301C B13 F30	109,0	0,615
2CSR255565R1165	DSX301C B16 F30	109,1	0,697
2CSR255565R1205	DSX301C B20 F30	109,6	0,959
2CSR255565R1064	DSX301C C6 F30	108,6	0,422
2CSR255565R1104	DSX301C C10 F30	108,5	0,480
2CSR255565R1134	DSX301C C13 F30	109,0	0,615
2CSR255565R1164	DSX301C C16 F30	109,1	0,697
2CSR255565R1204	DSX301C C20 F30	109,6	0,959
2CSR255163R2105	DS301C B10 A100	108,5	0,480
2CSR255163R2165	DS301C B16 A100	109,1	0,697
2CSR255163R2205	DS301C B20 A100	109,6	0,959
2CSR255163R2104	DS301C C10 A100	108,5	0,480
2CSR255163R2164	DS301C C16 A100	109,1	0,697
2CSR255163R2204	DS301C C20 A100	109,6	0,959
2CSR255163R3105	DS301C B10 A300	108,5	0,480
2CSR255163R3165	DS301C B16 A300	109,1	0,697
2CSR255163R3205	DS301C B20 A300	109,6	0,959
2CSR255163R3104	DS301C C10 A300	108,5	0,480
2CSR255163R3164	DS301C C16 A300	109,1	0,697
2CSR255163R3204	DS301C C20 A300	109,6	0,959
2CSR255165R2105	DSX301C B10 A100	108,5	0,480
2CSR255165R2165	DSX301C B16 A100	109,1	0,697
2CSR255165R2205	DSX301C B20 A100	109,6	0,959

## Extrapolation Factors

Product Code	Product Name	Weight [g]	Average power loss [W]
2CSR255165R2104	DSX301C C10 A100	108,5	0,480
2CSR255165R2164	DSX301C C16 A100	109,1	0,697
2CSR255165R2204	DSX301C C20 A100	109,6	0,959
2CSR255165R3105	DSX301C B10 A300	108,5	0,480
2CSR255165R3165	DSX301C B16 A300	109,1	0,697
2CSR255165R3205	DSX301C B20 A300	109,6	0,959
2CSR255165R3104	DSX301C C10 A300	108,5	0,480
2CSR255165R3164	DSX301C C16 A300	109,1	0,697
2CSR255165R3204	DSX301C C20 A300	109,6	0,959
2CSR275563R1064	DS301C M C6 F30	108,6	0,422
2CSR275563R1104	DS301C M C10 F30	108,5	0,480
2CSR275563R1134	DS301C M C13 F30	109,0	0,615
2CSR275563R1164	DS301C M C16 F30	109,1	0,697
2CSR275563R1204	DS301C M C20 F30	109,6	0,959
2CSR275563R1065	DS301C M B6 F30	108,6	0,422
2CSR275563R1105	DS301C M B10 F30	108,5	0,480
2CSR275563R1135	DS301C M B13 F30	109,0	0,615
2CSR275563R1165	DS301C M B16 F30	109,1	0,697
2CSR275563R1205	DS301C M B20 F30	109,6	0,959
2CSR275163R1064	DS301C M C6 A30	108,6	0,422
2CSR275163R1104	DS301C M C10 A30	108,5	0,480
2CSR275163R1134	DS301C M C13 A30	109,0	0,615
2CSR275163R1164	DS301C M C16 A30	109,1	0,697
2CSR275163R1204	DS301C M C20 A30	109,6	0,959
2CSR275163R1065	DS301C M B6 A30	108,6	0,422
2CSR275163R1105	DS301C M B10 A30	108,5	0,480
2CSR275163R1135	DS301C M B13 A30	109,0	0,615
2CSR275163R1165	DS301C M B16 A30	109,1	0,697
2CSR275163R1205	DS301C M B20 A30	109,6	0,959

# Glossary

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## Environmental impact Indicators

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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

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## Resource indicators

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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		Optional indicators	
CfRu	Components for re-use	Tot PE	Total use of primary energy during the life cycle
MfR	Materials for recycling	Efp	Emissions of Fine particles
MfER	Materials for energy recovery	IrHH	Ionizing radiation, human health
EE	Exported Energy	ETX FW	Ecotoxicity, freshwater
		HTX CE	Human toxicity, carcinogenic effects
		HTX N-CE	Human toxicity, non-carcinogenic effects
		IrLS	Impact related to Land use / soil quality

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