Product Environmental Profile

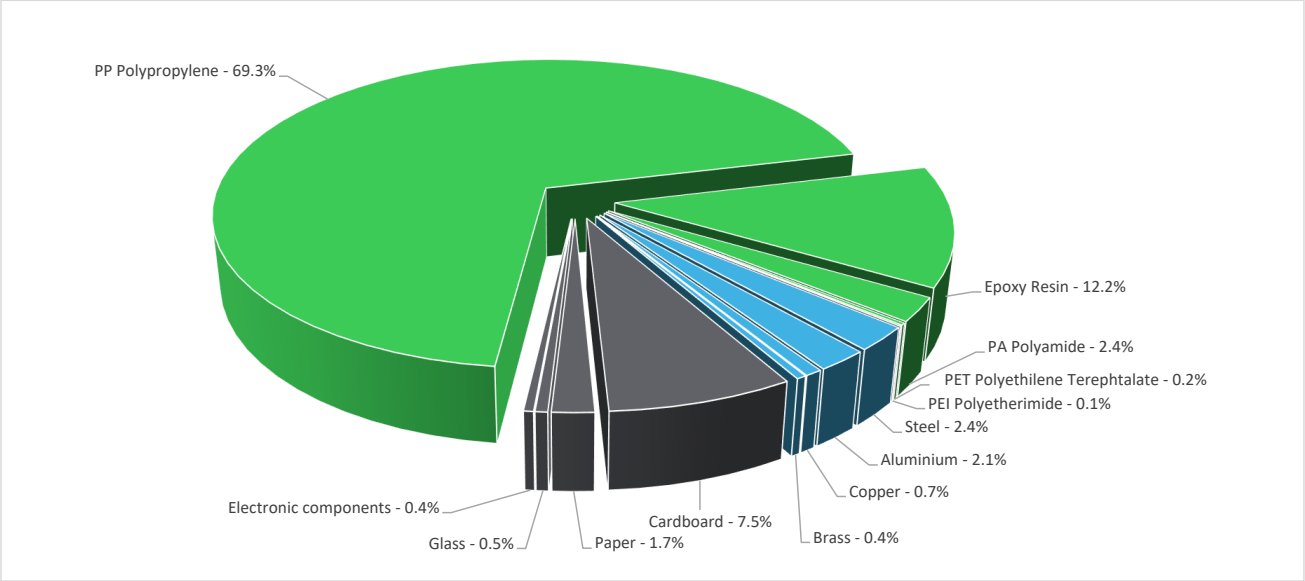
EasyLogic PFC -Low voltage cylindrical capacitors

General information

Reference product	EasyLogic PFC -Low voltage cylindrical capacitors - BLRCS250A300B40
Description of the product	PFC capacitors are low voltage cylindrical capacitors optimized to deliver under standard operating conditions for Networks with insignificant non linear loads.They can be used in fixed and automatic Power Factor correction systems.
Description of the range	Single product
Functional unit	To supply the rated reactive energy at rated supply voltage both in 50 & 60Hz to improve the power factor in the networks according to the IEC 60831-1 and IEC 60831-2
Specifications are:	• Technical datas: - Mean life expectancy up to 100,000 hours for Standard Duty and 120,000 hours for Heavy Duty - Power ratings from 1 to 33.9 kvar for Standard Duty and 6.7 to 37.7 kvar for Heavy Duty - Maximum Ambient temperature up to 55 °C - Inrush current withstand up to 200 x In for Standard Duty and 220 x In for Heavy Duty - Harmonic content withstand ≤ 10% for Standard Duty & ≤ 15% for Heavy Duty - Mounting Indoor, Upright - Compliant with standards IEC 60831-1 and -2.

Constituent materials

Reference product mass	2312 g	including the product, its packaging and additional elements and accessories



	Plastics	84.20%
	Metals	5.60%
	Others	10.10%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
https://www.se.com/ww/en/work/support/green-premium/

Additional environmental information

End Of Life	Recyclability potential:	**6%**	The recyclability rate was calculated from the recycling rates of each material making up the product with the exception of data using the ESR database. For materials or components using the ESR database or the absence of data the conservative hypothesis "0% recyclability" was used.

Environmental impacts

Reference service life time	20 years			
Product category	Other equipments - Passive product - non-continuous operation			
Installation elements	No special components needed			
Use scenario	In Passive mode, Capacitor is considered to be charged and hence, Power Consumption = Watt loss/KVAr * KVAr rating of Capacitor. For e.g for a 25KVAr capacitor with watt loss of 0.5 watts/KVAr, Power consumption = 0.5*25 = 12.5 Watts.			
Time representativeness	The collected data are representative of the year			
Technological representativeness	The Modules of Technologies such as material production, manufacturing processes and transport technology used in the PEP analysis (LCA EIME in the case) are Similar and représentaive of the actual type of technologies used to make the product.			
Geographical representativeness	Rest of the World			
Energy model used	**[A1 - A3]**	**[A5]**	**[B6]**	**[C1 - C4]**
	Electricity Mix; High voltage; 2018; India, IN	Electricity Mix; Low voltage; 2018; Turkey, TR Electricity Mix; Low voltage; 2018; Egypt, EG Electricity Mix; Low voltage; 2018; China, CN Electricity Mix; Low voltage; 2018; Indonesia, ID Electricity Mix; Low voltage; 2018; Brazil, BR	Electricity Mix; Low voltage; 2018; Turkey, TR Electricity Mix; Low voltage; 2018; Egypt, EG Electricity Mix; Low voltage; 2018; China, CN Electricity Mix; Low voltage; 2018; Indonesia, ID Electricity Mix; Low voltage; 2018; Brazil, BR	Electricity Mix; Low voltage; 2018; Turkey, TR Electricity Mix; Low voltage; 2018; Egypt, EG Electricity Mix; Low voltage; 2018; China, CN Electricity Mix; Low voltage; 2018; Indonesia, ID Electricity Mix; Low voltage; 2018; Brazil, BR

Detailed results of the optional indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

Mandatory Indicators		EasyLogic PFC -Low voltage cylindrical capacitors - BLRCS250A300B40						
Impact indicators	**Unit**	**Total (without Module D)**	**[A1 - A3] - Manufacturing**	**[A4] - Distribution**	**[A5] - Installation**	**[B1 - B7] - Use**	**[C1 - C4] - End of life**	**[D] - Benefits and loads**
Contribution to climate change	kg CO2 eq	6.68E+02	2.85E+01	4.44E+00	0*	6.26E+02	8.96E+00	-1.53E+00
Contribution to climate change-fossil	kg CO2 eq	6.67E+02	2.83E+01	4.44E+00	0*	6.25E+02	8.89E+00	-1.50E+00
Contribution to climate change-biogenic	kg CO2 eq	9.35E-01	1.88E-01	0*	0*	6.85E-01	6.24E-02	-3.88E-02
Contribution to climate change-land use and land use change	kg CO2 eq	1.23E-07	2.92E-08	0*	0*	0*	9.35E-08	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	9.35E-06	3.27E-06	3.92E-06	0*	2.15E-06	1.34E-08	-2.20E-07
Contribution to acidification	mol H+ eq	3.30E+00	1.67E-01	1.93E-02	0*	3.11E+00	7.52E-03	-1.38E-02
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	4.08E-04	1.91E-04	5.20E-07	5.75E-08	3.69E-05	1.80E-04	-4.83E-06
Contribution to eutrophication marine	kg N eq	4.13E-01	2.80E-02	8.86E-03	7.38E-05	3.73E-01	2.73E-03	-8.74E-04
Contribution to eutrophication, terrestrial	mol N eq	4.81E+00	3.06E-01	9.60E-02	7.52E-04	4.37E+00	3.18E-02	-9.78E-03
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.37E+00	9.61E-02	3.15E-02	1.80E-04	1.24E+00	7.80E-03	-3.53E-03
Contribution to resource use, minerals and metals	kg Sb eq	1.84E-04	1.61E-04	0*	0*	1.75E-05	5.65E-06	-1.46E-04
Contribution to resource use, fossils	MJ	1.03E+04	5.60E+02	5.52E+01	0*	9.70E+03	3.24E+01	-2.37E+01
Contribution to water use	m3 eq	2.59E+01	4.71E+00	2.25E-01	2.75E-02	2.00E+01	9.49E-01	-5.66E-01

Inventory flows Indicators		EasyLogic PFC -Low voltage cylindrical capacitors - BLRCS250A300B40						
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.28E+03	1.10E+01	0*	0*	1.27E+03	1.98E-01	-8.79E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	5.25E+00	5.25E+00	0*	0*	0*	0*	0.00E+00
Contribution to total use of renewable primary energy resources	MJ	1.28E+03	1.63E+01	0*	0*	1.27E+03	1.98E-01	-8.79E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.02E+04	4.12E+02	5.52E+01	0*	9.70E+03	3.24E+01	-2.37E+01
Contribution to use of non renewable primary energy resources used as raw material	MJ	1.48E+02	1.48E+02	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	1.03E+04	5.60E+02	5.52E+01	0*	9.70E+03	3.24E+01	-2.37E+01
Contribution to use of secondary material	kg	2.87E-01	2.87E-01	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m^3	6.03E-01	1.10E-01	5.24E-03	6.40E-04	4.66E-01	2.21E-02	-1.32E-02
Contribution to hazardous waste disposed	kg	2.32E+01	1.28E+01	3.68E-03	0*	1.04E+01	0*	-1.21E+01
Contribution to non hazardous waste disposed	kg	1.07E+02	1.67E+01	0*	3.00E-01	8.69E+01	3.53E+00	-2.15E+00
Contribution to radioactive waste disposed	kg	2.99E-02	9.67E-03	8.82E-04	0*	1.92E-02	1.30E-04	-1.61E-03
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	2.27E-01	3.16E-02	0*	0*	0*	1.95E-01	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	2.31E-03	3.80E-04	0*	0*	0*	1.93E-03	0.00E+00

* represents less than 0.01% of the total life cycle of the reference flow

Contribution to biogenic carbon content of the product	kg de C	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	5.13E-02

Mandatory Indicators		EasyLogic PFC -Low voltage cylindrical capacitors - BLRCS250A300B40							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	6.26E+02	0*	0*	0*	0*	0*	6.26E+02	0*
Contribution to climate change-fossil	kg CO2 eq	6.25E+02	0*	0*	0*	0*	0*	6.25E+02	0*
Contribution to climate change-biogenic	kg CO2 eq	6.85E-01	0*	0*	0*	0*	0*	6.85E-01	0*
Contribution to climate change-land use and land use change	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	2.15E-06	0*	0*	0*	0*	0*	2.15E-06	0*
Contribution to acidification	mol H+ eq	3.11E+00	0*	0*	0*	0*	0*	3.11E+00	0*
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$eq	3.69E-05	0*	0*	0*	0*	0*	3.69E-05	0*
Contribution to eutrophication marine	kg N eq	3.73E-01	0*	0*	0*	0*	0*	3.73E-01	0*
Contribution to eutrophication, terrestrial	mol N eq	4.37E+00	0*	0*	0*	0*	0*	4.37E+00	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.24E+00	0*	0*	0*	0*	0*	1.24E+00	0*
Contribution to resource use, minerals and metals	kg Sb eq	1.75E-05	0*	0*	0*	0*	0*	1.75E-05	0*
Contribution to resource use, fossils	MJ	9.70E+03	0*	0*	0*	0*	0*	9.70E+03	0*
Contribution to water use	m3 eq	2.00E+01	0*	0*	0*	0*	0*	2.00E+01	0*

Inventory flows Indicators		EasyLogic PFC -Low voltage cylindrical capacitors - BLRCS250A300B40							
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.27E+03	0*	0*	0*	0*	0*	1.27E+03	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	1.27E+03	0*	0*	0*	0*	0*	1.27E+03	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.70E+03	0*	0*	0*	0*	0*	9.70E+03	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	9.70E+03	0*	0*	0*	0*	0*	9.70E+03	0*
Contribution to use of secondary material	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m^3	4.66E-01	0*	0*	0*	0*	0*	4.66E-01	0*
Contribution to hazardous waste disposed	kg	1.04E+01	0*	0*	0*	0*	0*	1.04E+01	0*
Contribution to non hazardous waste disposed	kg	8.69E+01	0*	0*	0*	0*	0*	8.69E+01	0*
Contribution to radioactive waste disposed	kg	1.92E-02	0*	0*	0*	0*	0*	1.92E-02	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	0*	0*	0*	0*	0*

** represents less than 0.01% of the total life cycle of the reference flow*

Life cycle assessment performed with EIME version v6.1, database version 2023-02 in compliance with ISO14044, EF 3.0 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

Registration number :	ENVPEP1611007_V3	*Drafting rules*	PCR-4-ed4-EN-2021 09 06
		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Date of issue	09-2024	*Information and reference documents*	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14021 : 2016			
Internal X External			
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022			
The components of the present PEP may not be compared with components from any other program.			
Document complies with ISO 14021:2016 "Environmental labels and declarations. Type II environmental declarations"			

Schneider Electric Industries SAS
Country Customer Care Center
http://www.se.com/contact
35, rue Joseph Monier
CS 30323
F- 92500 Rueil Malmaison Cedex
RCS Nanterre 954 503 439
Capital social 928 298 512 €