Product Environmental Profile

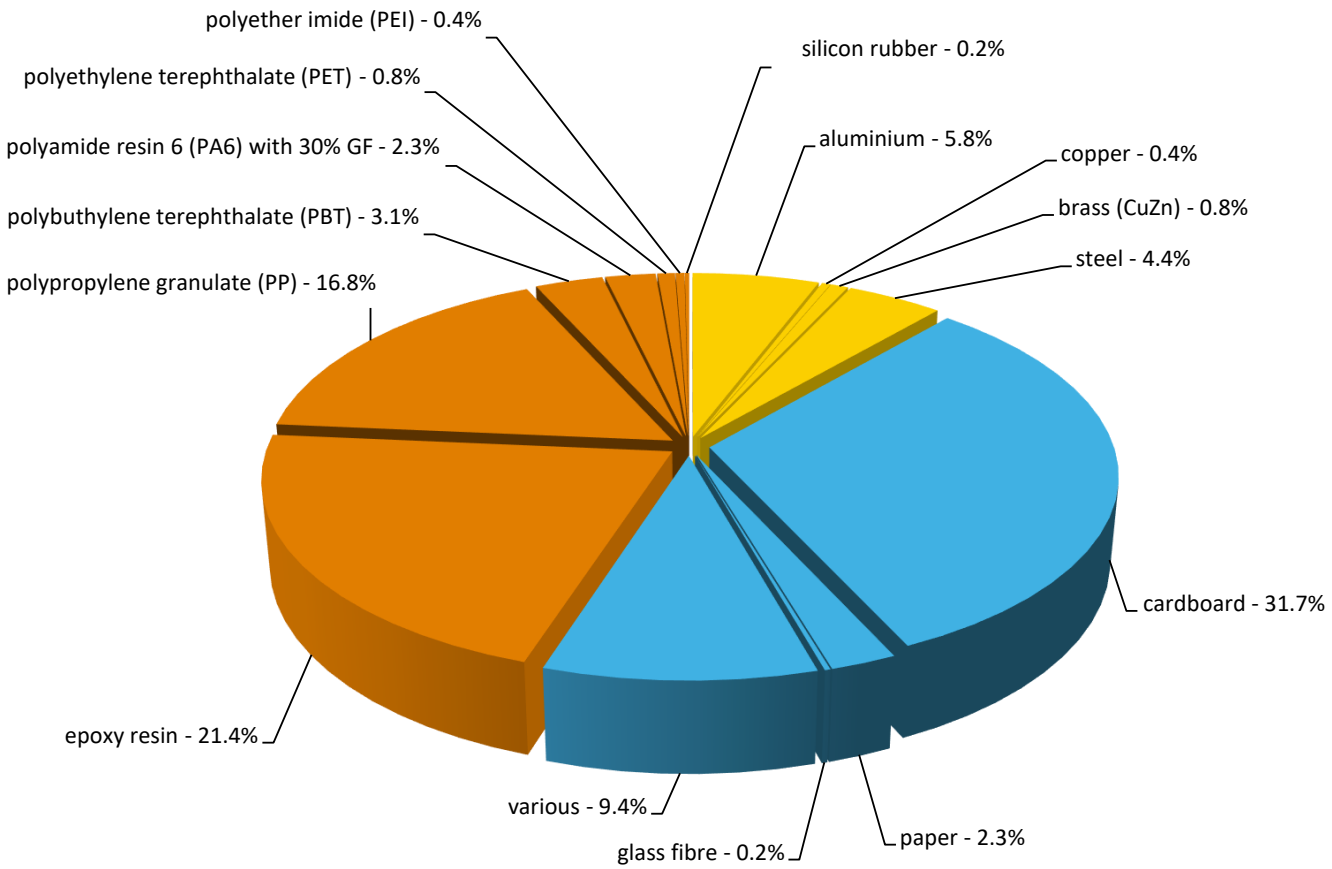
EasyLogic PFC

General information

Representative product	EasyLogic PFC -BLRCS010A012B40
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. • 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 30.3 kvar for Standard Duty and 6.7 to 37.7 kvar for Heavy Duty - Operating 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.
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- Part 1 &2

Constituent materials

Reference product mass	585g	including the product, its packaging and additional elements and accessories



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page

Additional environmental information

The EasyLogic PFC presents the following relevent environmental aspects	
Design	Reactive energy management ensures better utilization of electrical machines,optimized electrical conductor sizes and reduced penalties from the utilities.Availability of more energy at utilities ensures in the reduction of total Co2 emissions for a sustainable future Utility power bills are typically reduced by 5 % to 10 %.
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 193.8 g, consisting of cardboard (99%), PE film (1%) Packaging recycled materials is 100% of total packaging mass. Product distribution optimised by setting up local distribution centres
Installation	PFC capacitor need to follow the instruction as per the installation guide available along with every product. This document can be downloaded from internet also for the customers. It is very important to keep the environmental condition and ventilation needs of this product as per what is mentioned in the instruction manual
Use	The user must ensure regular maitence of the contactor and CB of all stages. The periodic maintenanace interval recommonded is <3 months >> Every month curent, voltage, temperature and terminal tightness of capacitor to be checked and recorded >> Electrical equipment should be installed, operated, serviced and maintained only by qualified person
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains Resistor (8.11g), Connection wire 0.5sq.mm (3.7g), Connection wire 1.5asq.mm (48g) that should be separated from the stream of waste so as to optimize end-of-life treatment. The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page Recyclability potential: **44%** Based on “ECO’DEEE recyclability and recoverability calculation method” (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

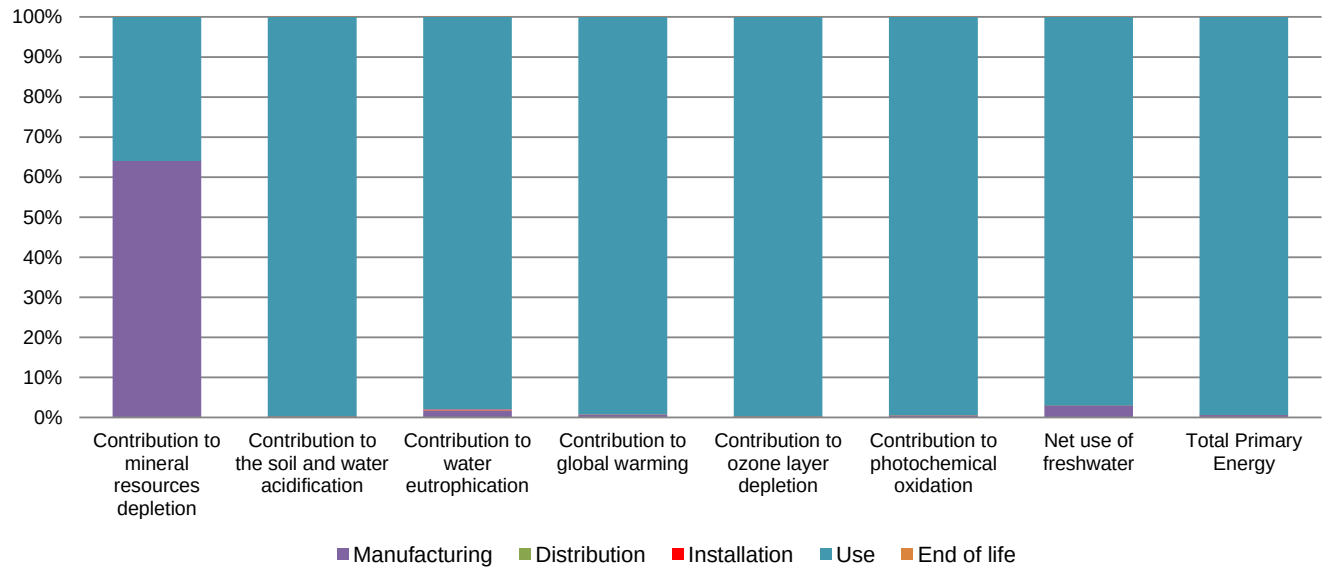
Environmental impacts

Reference life time	10 years
Product category	Passive products - continuous operation
Installation elements	No special components needed
Use scenario	Product dissipation is 15 W full load, loading rate is 30% and service uptime percentage is 100% The product is in active mode for ~80% in fixed compensation applications and 50% in automatic PF control applications with a power use of <0.5W/KVAr

Geographical representativeness	Middle East Asia
Technological representativeness	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. • 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 30.3 kvar for Standard Duty and 6.7 to 37.7 kvar for Heavy Duty - Operating 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.

Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: India	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27

Compulsory indicators	**EasyLogic PFC - BLRCS010A012B40**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	7.86E-05	5.03E-05	0*	0*	2.83E-05	0*
Contribution to the soil and water acidification	kg SO_2 eq	4.70E+00	1.07E-02	0*	0*	4.69E+00	0*
Contribution to water eutrophication	kg PO_4^{3-} eq	1.80E-01	3.06E-03	7.93E-05	5.01E-04	1.76E-01	4.60E-05
Contribution to global warming	kg CO_2 eq	6.25E+02	4.27E+00	7.54E-02	2.63E-01	6.21E+02	1.16E-01
Contribution to ozone layer depletion	kg CFC11 eq	1.51E-04	2.92E-07	0*	0*	1.51E-04	0*
Contribution to photochemical oxidation	kg C_2H_4 eq	2.23E-01	9.99E-04	2.46E-05	6.29E-05	2.22E-01	0*
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.67E+00	4.95E-02	0*	0*	1.62E+00	0*
Total Primary Energy	MJ	1.08E+04	6.15E+01	0*	0*	1.07E+04	0*



Optional indicators		EasyLogic PFC - BLRCS010A012B40					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	6.46E+03	6.43E+01	1.06E+00	0*	6.39E+03	6.81E-01
Contribution to air pollution	m³	2.70E+04	3.46E+02	3.21E+00	0*	2.66E+04	5.31E+00
Contribution to water pollution	m³	2.78E+04	1.64E+03	1.24E+01	1.38E+01	2.60E+04	6.11E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.59E-01	1.59E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	9.02E+02	2.43E+00	0*	0*	9.00E+02	0*
Total use of non-renewable primary energy resources	MJ	9.87E+03	5.91E+01	1.01E+00	0*	9.81E+03	0*
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	9.02E+02	2.19E+00	0*	0*	9.00E+02	0*
Use of renewable primary energy resources used as raw material	MJ	2.36E-01	2.36E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.86E+03	4.73E+01	1.01E+00	0*	9.81E+03	0*
Use of non renewable primary energy resources used as raw material	MJ	1.17E+01	1.17E+01	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Waste categories	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	2.73E+00	2.07E+00	0*	0*	0*	6.67E-01
Non hazardous waste disposed	kg	2.32E+03	1.75E+00	0*	0*	2.32E+03	0*
Radioactive waste disposed	kg	1.89E+00	1.18E-03	0*	0*	1.89E+00	0*
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.95E-01	2.37E-02	0*	0*	0*	1.72E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1.19E-02	1.35E-03	0*	0*	0*	1.06E-02
Exported Energy	MJ	5.16E-03	0*	0*	5.16E-03	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.5, database version 2015-04.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

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 N°	ENVPEP1611007_V2	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	12/2022		
Validity period	5 years	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data, in compliance with ISO 14025 : 2010

Internal X External

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

Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »

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Published by Schneider Electric