

Product Environmental Profile

PowerLogic AccuSine™ PCSP

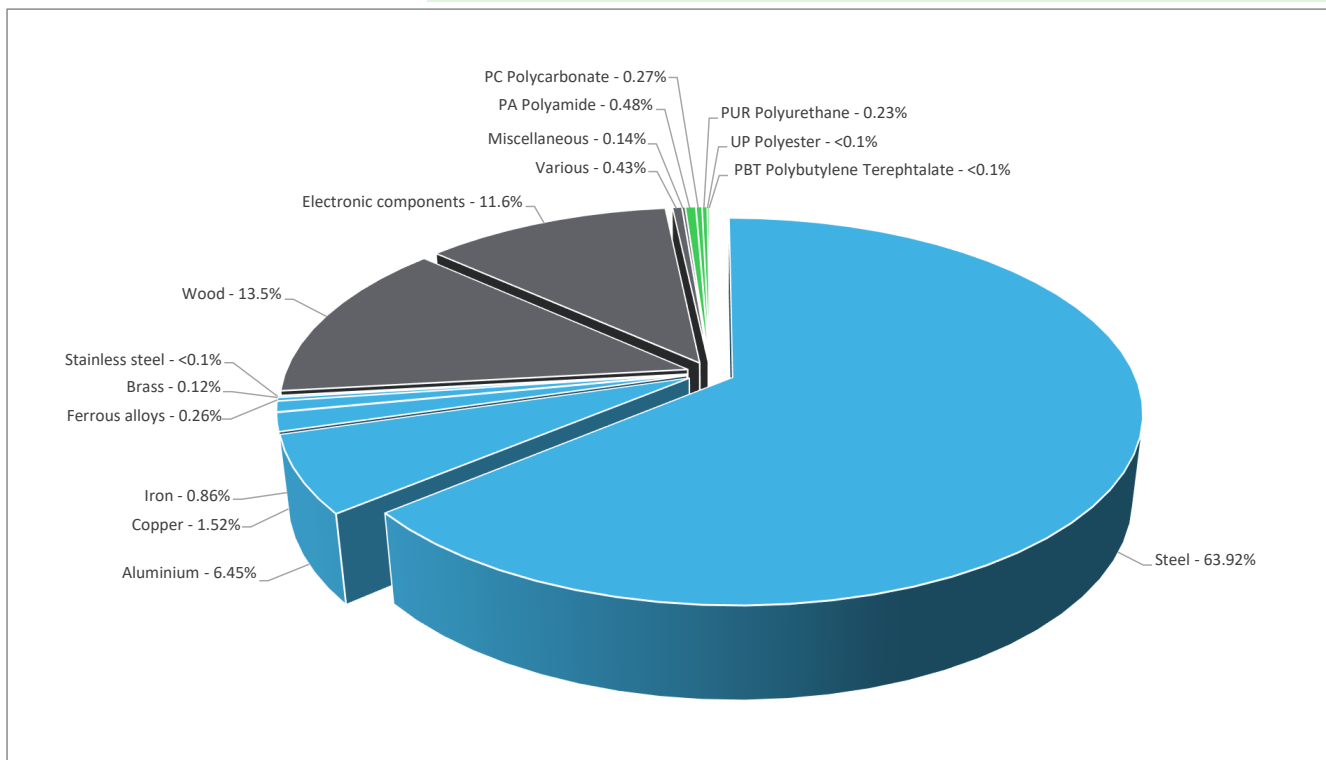


General information

Reference product	PowerLogic AccuSine™ PCSP - PCSP300D5IP54
Description of the product	PowerLogic AccuSine™ PCSP (Power Conditioning System Plus) is an advanced power electronics device that actively mitigates harmonic distortion in electrical power systems by injecting compensating currents to cancel out unwanted harmonics. It's a dynamic solution that provides real-time power quality correction.
Description of the range	The environmental impacts of this reference product are representative of the impacts of the other products of the range which are developed with a similar technology. PowerLogic™ AccuSine PCSP is used in harsh electrical conditions, for heavy industrial applications including mission critical environments to improve power quality. It operates on low voltage networks (208 - 690 V) with ratings from 60 to 300A and can be scaled to compensate up to 3000 A. The products of the range are: PowerLogic™ AccuSine PCSP & PFVP
Functional unit	PowerLogic AccuSine™ PCSP is flexible, high performance solution to stabilize electrical networks by providing harmonic mitigation and power factor correction, and load balancing, according to the appropriate use scenario, and for a reference lifetime of 10 years.
Specifications are:	Network rated voltage : 380...480 V AC Network frequency : 50/60 Hz +/- 3 Hz auto sensing RMS output current rating : 300 A Protection: IP54 Certifications: CE, UL, IEC 61439-1 Scalability: Up to 10 units in parallel (max 3000 A compensation)

Constituent materials

Reference product mass 506000 g including the product, its packaging and additional elements



Plastics	1.1%
Metals	73.2%
Others	25.7%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric website
<https://www.se.com>

Additional environmental information

End Of Life	Recyclability potential:	73%	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECYLAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the EIME database and the related PSR was taken. If no data was found a conservative assumption was used (0% recyclability).
--------------------	--------------------------	------------	--

Environmental impacts

Reference service life time	10 years		
Product category	Other equipments - Active product		
Life cycle of the product	The manufacturing, the distribution, the installation, the use and the end of life were taken into consideration in this study		
Electricity consumption	The electricity consumed during manufacturing processes is considered for each part of the product individually, the final assembly generates a negligible consumption		
Installation elements	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal)		
Use scenario	The product is in active mode 80% of the time with a power use of 4700 W, In stand-by mode 19% of the time with a power use of 821W and In Off mode 1% of the time with a power use of 0W for 10 years.		
Time representativeness	The collected data are representative of the year 2025		
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 representative of the actual type of technologies used to make the product.		
Geographical representativeness	Final assembly site	Use phase	
	Bangalore (India), Portland (USA)	Global	
Energy model used	[A1 - A3]	[A5]	[B6]
	Electricity Mix; Low voltage; 2020; India, IN	No energy used	Electricity Mix; Low voltage; 2020; Europe, EU-27
	Electricity Mix; Low voltage; 2020; China, CN		Electricity Mix; Low voltage; 2020; United States, US
	Electricity Mix; Low voltage; 2020; Europe, EU-27		Electricity Mix; Low voltage; 2020; Asia Pacific, APAC
	Electricity Mix; Low voltage; 2020; United States, US		Electricity Mix; Low voltage; 2020; Australia, AU
			Electricity Mix; Low voltage; 2020; Egypt, EG
	[C1 - C4]		Global, European and French datasets are used.

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.se.com/contact>

Mandatory Indicators		PowerLogic AccuSine™ PCSP - PCSP300D5IP54						
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	1.90E+05	4.07E+03	3.72E+02	1.29E+02	1.84E+05	7.02E+02	-1.54E+03
Contribution to climate change-fossil	kg CO2 eq	1.88E+05	4.17E+03	3.72E+02	2.74E+01	1.83E+05	6.52E+02	-1.52E+03
Contribution to climate change-biogenic	kg CO2 eq	1.82E+03	-9.17E+01	0*	1.02E+02	1.76E+03	4.92E+01	-1.83E+01
Contribution to climate change-land use and land use change	kg CO2 eq	2.16E-03	2.00E-03	0*	2.40E-07	0*	1.63E-04	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	1.82E-03	6.60E-04	3.29E-04	8.66E-07	8.15E-04	1.82E-05	-2.30E-04
Contribution to acidification	mol H+ eq	1.06E+03	3.13E+01	1.62E+00	1.53E-01	1.03E+03	2.78E+00	-1.11E+01
Contribution to eutrophication, freshwater	kg P eq	2.36E-01	1.04E-02	4.36E-05	3.11E-05	2.21E-01	4.38E-03	-3.41E-03
Contribution to eutrophication marine	kg N eq	1.24E+02	3.39E+00	7.44E-01	3.78E-02	1.19E+02	5.59E-01	-8.84E-01
Contribution to eutrophication, terrestrial	mol N eq	1.60E+03	3.75E+01	8.06E+00	4.98E-01	1.55E+03	6.26E+00	-1.01E+01
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.07E+02	1.25E+01	2.64E+00	1.07E-01	3.90E+02	1.72E+00	-3.60E+00
Contribution to resource use, minerals and metals	kg Sb eq	4.17E-01	3.81E-01	0*	0*	3.64E-02	6.33E-05	-3.53E-01
Contribution to resource use, fossils	MJ	3.76E+06	9.80E+04	4.64E+03	5.09E+02	3.65E+06	7.36E+03	-3.11E+04
Contribution to water use	m3 eq	1.32E+04	1.67E+03	1.89E+01	1.51E+00	1.14E+04	8.35E+01	-6.35E+02

Inventory flows Indicators		PowerLogic AccuSine™ PCSP - PCSP300D5IP54						
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	5.86E+05	2.89E+03	0*	0*	5.83E+05	3.75E+02	-5.35E+02
Contribution to use of renewable primary energy resources used as raw material	MJ	1.33E+03	1.33E+03	0*	0*	0*	0*	0.00E+00
Contribution to total use of renewable primary energy resources	MJ	5.87E+05	4.22E+03	0*	0*	5.83E+05	3.75E+02	-5.35E+02
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.76E+06	9.70E+04	4.64E+03	5.09E+02	3.65E+06	7.36E+03	-3.11E+04
Contribution to use of non renewable primary energy resources used as raw material	MJ	9.98E+02	9.98E+02	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	3.76E+06	9.80E+04	4.64E+03	5.09E+02	3.65E+06	7.36E+03	-3.11E+04
Contribution to use of secondary material	kg	1.07E-03	1.07E-03	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	m³	3.08E+02	3.89E+01	4.40E-01	3.46E-02	2.66E+02	2.60E+00	-1.48E+01
Contribution to hazardous waste disposed	kg	1.95E+04	1.49E+04	0*	2.63E+01	4.54E+03	4.77E+01	-2.78E+04
Contribution to non hazardous waste disposed	kg	3.17E+04	2.18E+03	0*	3.58E+00	2.91E+04	4.43E+02	-1.64E+03
Contribution to radioactive waste disposed	kg	6.56E+00	1.31E+00	7.41E-02	1.51E-03	5.16E+00	1.98E-02	-1.01E+00
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	3.71E+02	4.57E+01	0*	0*	0*	3.25E+02	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	1.00E+01	6.86E+00	0*	0*	0*	3.18E+00	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 of C	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg of C	2.77E+01

* The calculation of the biogenic carbon is based on the Ademe for the Cardboard (28%), EN16485 for Wood (39,52%), and APESA/RECORD for Paper (37,8%)

Mandatory Indicators		PowerLogic AccuSine™ PCSP - PCSP300D5IP54							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	1.84E+05	0*	0*	0*	0*	0*	1.84E+05	0*
Contribution to climate change-fossil	kg CO2 eq	1.83E+05	0*	0*	0*	0*	0*	1.83E+05	0*
Contribution to climate change-biogenic	kg CO2 eq	1.76E+03	0*	0*	0*	0*	0*	1.76E+03	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	8.15E-04	0*	0*	0*	0*	0*	8.15E-04	0*
Contribution to acidification	mol H+ eq	1.03E+03	0*	0*	0*	0*	0*	1.03E+03	0*
Contribution to eutrophication, freshwater	kg P eq	2.21E-01	0*	0*	0*	0*	0*	2.21E-01	0*
Contribution to eutrophication marine	kg N eq	1.19E+02	0*	0*	0*	0*	0*	1.19E+02	0*
Contribution to eutrophication, terrestrial	mol N eq	1.55E+03	0*	0*	0*	0*	0*	1.55E+03	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	3.90E+02	0*	0*	0*	0*	0*	3.90E+02	0*
Contribution to resource use, minerals and metals	kg Sb eq	3.64E-02	0*	0*	0*	0*	0*	3.64E-02	0*
Contribution to resource use, fossils	MJ	3.65E+06	0*	0*	0*	0*	0*	3.65E+06	0*
Contribution to water use	m3 eq	1.14E+04	0*	0*	0*	0*	0*	1.14E+04	0*

Inventory flows Indicators		PowerLogic AccuSine™ PCSP - PCSP300D5IP54							
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	5.83E+05	0*	0*	0*	0*	0*	5.83E+05	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	5.83E+05	0*	0*	0*	0*	0*	5.83E+05	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.65E+06	0*	0*	0*	0*	0*	3.65E+06	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	3.65E+06	0*	0*	0*	0*	0*	3.65E+06	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	m³	2.66E+02	0*	0*	0*	0*	0*	2.66E+02	0*
Contribution to hazardous waste disposed	kg	4.54E+03	0*	0*	0*	0*	0*	4.54E+03	0*
Contribution to non hazardous waste disposed	kg	2.91E+04	0*	0*	0*	0*	0*	2.91E+04	0*
Contribution to radioactive waste disposed	kg	5.16E+00	0*	0*	0*	0*	0*	5.16E+00	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 v6.3.3, database version 2025-04 in compliance with ISO14044, EF3.1 method is applied, for biogenic carbon storage, assessment methodology -1/1 is used

Extrapolation rules are based on mass proportionality for the manufacturing, distribution, installation, and end-of-life stages, while energy consumption is used as the scaling parameter for the use phase. Results for the other products of the range are available upon request.

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 :	SCHN-02273-V01.01-EN	Drafting rules	PEP-PCR-ed4-2021 09 06
		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Verifier accreditation N°	VH42	Information and reference documents	www.pep-ecopassport.org
Date of issue	02-2026	Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2006			
Internal	External	X	
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)			
PEPs are compliant with NF C08-100-1:2022 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"			



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

www.se.com

Published by Schneider Electric

SCHN-02273-V01.01-EN

©2024 - Schneider Electric – All rights reserved

02-2026