

Product Environmental Profile

PowerLogic PFC Detuned Reactor





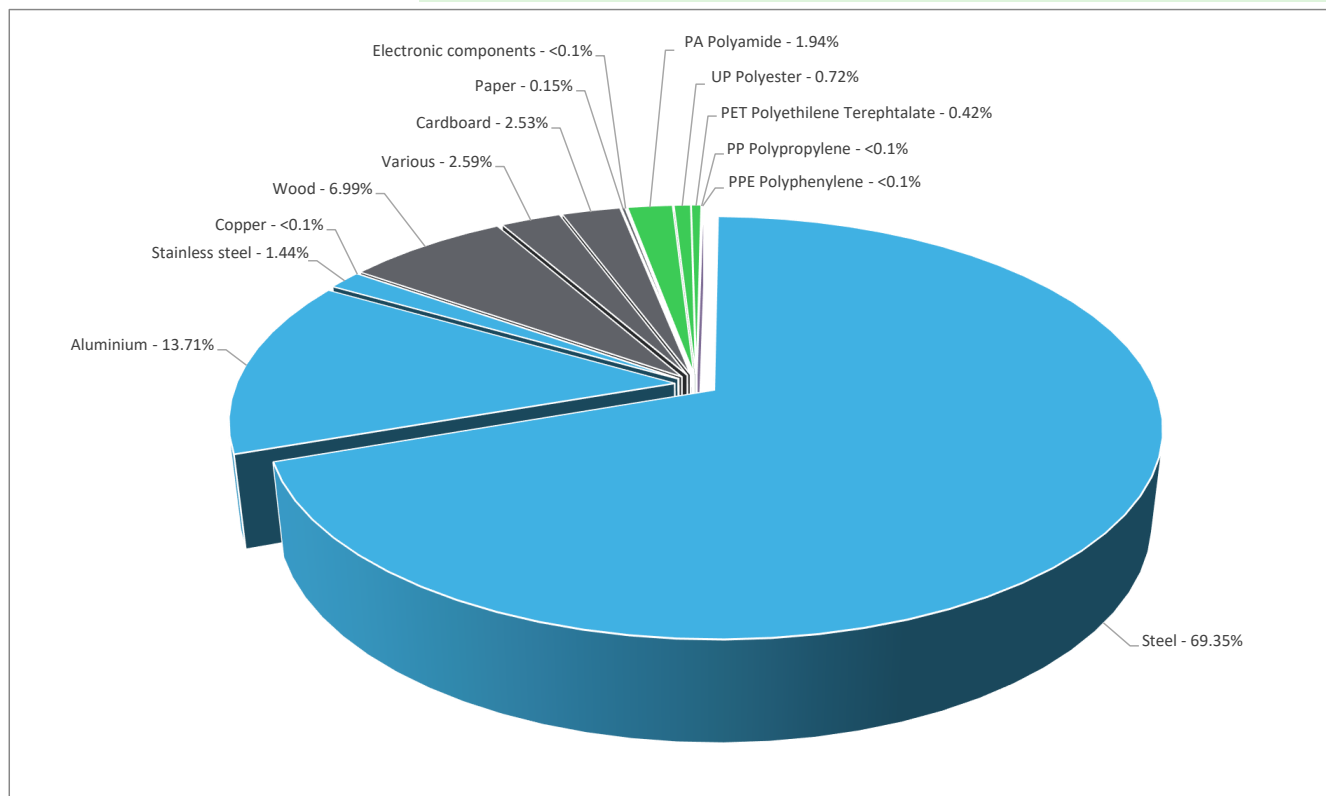
General information

Reference product	PowerLogic PFC Detuned Reactor - LVR07500A40T
Description of the product	PowerLogic PFC Detuned Reactor should be associated with capacitor banks for Power Factor Correction in systems with significant non-linear loads.
Description of the range	Single product
Functional unit	The use of detuned reactors thus prevents harmonic resonance problems, avoids the risk of overloading the capacitors and helps reduce voltage harmonic distortion in the network.
Specifications are:	3 Phase , Dry type , Iron core , Vacuum impregnated. Operating Network Voltage 220V to 690V Operating network frequency 50/60Hz Power ratings from 5kvar to 100 kvar Tuning order 2.7 / 3.8 / 4.2 Insulation temperature class H (180°C) Insulation level 1.1KV Inductance tolerance per phase -5% to +5% Mounting Indoor, Upright Compliant with standards IEC60076-6 Reference life time - 20 Years



Constituent materials

Reference product mass	33607 g including the product, its packaging and additional elements and accessories
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Plastics	3.2%
Metals	84.5%
Others	12.3%



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:	93%	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.
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**Environmental impacts**

Reference service life time	20 years			
Product category	Other equipments - Passive product - non-continuous operation			
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	Load rate = 100% In Use rate = 40% RLT Total Dissipation (W) = 120 W			
Time representativeness	The collected data are representative of the year 2024			
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	Global			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Low voltage; 2018; Czech Republic, CZ	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27
		Electricity Mix; Low voltage; 2018; Asia Pacific, APAC	Electricity Mix; Low voltage; 2018; Asia Pacific, APAC	Electricity Mix; Low voltage; 2018; Asia Pacific, APAC

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			PowerLogic PFC Detuned Reactor - LVR07500A40T					
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	5.19E+03	2.27E+02	3.03E+01	4.78E+00	4.86E+03	7.49E+01	-1.55E+02
Contribution to climate change-fossil	kg CO2 eq	5.18E+03	2.23E+02	3.03E+01	8.92E-01	4.85E+03	7.43E+01	-1.53E+02
Contribution to climate change-biogenic	kg CO2 eq	1.14E+01	3.25E+00	0*	3.89E+00	3.66E+00	6.29E-01	-2.08E+00
Contribution to climate change-land use and land use change	kg CO2 eq	3.55E-06	3.52E-06	0*	0*	0*	2.42E-08	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	9.35E-05	4.32E-05	2.68E-05	0*	2.33E-05	1.55E-07	-2.19E-05
Contribution to acidification	mol H+ eq	3.30E+01	1.39E+00	1.32E-01	0*	3.12E+01	2.59E-01	-9.47E-01
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	7.15E-03	9.88E-04	3.55E-06	6.20E-06	6.00E-03	1.48E-04	-3.79E-04
Contribution to eutrophication marine	kg N eq	3.75E+00	1.77E-01	6.06E-02	9.39E-04	3.45E+00	5.65E-02	-8.66E-02
Contribution to eutrophication, terrestrial	mol N eq	4.73E+01	1.94E+00	6.56E-01	1.10E-02	4.41E+01	6.16E-01	-9.87E-01
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.24E+01	6.51E-01	2.15E-01	2.43E-03	1.14E+01	2.06E-01	-3.38E-01
Contribution to resource use, minerals and metals	kg Sb eq	3.19E-02	3.17E-02	0*	0*	1.85E-04	3.83E-06	-2.83E-02
Contribution to resource use, fossils	MJ	1.07E+05	4.99E+03	3.77E+02	0*	9.67E+04	4.96E+03	-2.91E+03
Contribution to water use	m3 eq	3.11E+02	9.47E+01	1.54E+00	5.82E-01	1.88E+02	2.54E+01	-4.92E+01

Inventory flows Indicators		PowerLogic PFC Detuned Reactor - LVR07500A40T						
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	1.42E+04	1.16E+02	0*	0*	1.41E+04	0*	-5.66E+01
Contribution to use of renewable primary energy resources used as raw material	MJ	5.75E+01	5.75E+01	0*	0*	0*	0*	0.00E+00
Contribution to total use of renewable primary energy resources	MJ	1.43E+04	1.73E+02	0*	0*	1.41E+04	0*	-5.66E+01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.07E+05	4.92E+03	3.77E+02	0*	9.67E+04	4.96E+03	-2.91E+03
Contribution to use of non renewable primary energy resources used as raw material	MJ	6.12E+01	6.12E+01	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	1.07E+05	4.99E+03	3.77E+02	0*	9.67E+04	4.96E+03	-2.91E+03
Contribution to use of secondary material	kg	6.89E-01	6.89E-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	m³	7.23E+00	2.20E+00	3.58E-02	1.36E-02	4.39E+00	5.91E-01	-1.15E+00
Contribution to hazardous waste disposed	kg	2.62E+03	2.51E+03	0*	0*	1.14E+02	0*	-2.24E+03
Contribution to non hazardous waste disposed	kg	1.03E+03	2.68E+02	0*	3.94E+00	7.59E+02	2.98E+00	-1.80E+02
Contribution to radioactive waste disposed	kg	2.78E-01	1.76E-01	6.03E-03	9.71E-05	9.56E-02	2.66E-04	-1.18E-01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	3.34E+01	5.78E+00	0*	0*	0*	2.77E+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	5.31E-01	2.57E-01	0*	0*	0*	2.74E-01	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	1.19E+00						

Mandatory Indicators		PowerLogic PFC Detuned Reactor - LVR07500A40T							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	4.86E+03	0*	0*	0*	0*	0*	4.86E+03	0*
Contribution to climate change-fossil	kg CO2 eq	4.85E+03	0*	0*	0*	0*	0*	4.85E+03	0*
Contribution to climate change-biogenic	kg CO2 eq	3.66E+00	0*	0*	0*	0*	0*	3.66E+00	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	2.33E-05	0*	0*	0*	0*	0*	2.33E-05	0*
Contribution to acidification	mol H+ eq	3.12E+01	0*	0*	0*	0*	0*	3.12E+01	0*
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	6.00E-03	0*	0*	0*	0*	0*	6.00E-03	0*
Contribution to eutrophication marine	kg N eq	3.45E+00	0*	0*	0*	0*	0*	3.45E+00	0*
Contribution to eutrophication, terrestrial	mol N eq	4.41E+01	0*	0*	0*	0*	0*	4.41E+01	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.14E+01	0*	0*	0*	0*	0*	1.14E+01	0*
Contribution to resource use, minerals and metals	kg Sb eq	1.85E-04	0*	0*	0*	0*	0*	1.85E-04	0*
Contribution to resource use, fossils	MJ	9.67E+04	0*	0*	0*	0*	0*	9.67E+04	0*
Contribution to water use	m3 eq	1.88E+02	0*	0*	0*	0*	0*	1.88E+02	0*

Inventory flows Indicators		PowerLogic PFC Detuned Reactor - LVR07500A40T							
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	1.41E+04	0*	0*	0*	0*	0*	1.41E+04	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	1.41E+04	0*	0*	0*	0*	0*	1.41E+04	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.67E+04	0*	0*	0*	0*	0*	9.67E+04	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	9.67E+04	0*	0*	0*	0*	0*	9.67E+04	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	4.39E+00	0*	0*	0*	0*	0*	4.39E+00	0*
Contribution to hazardous waste disposed	kg	1.14E+02	0*	0*	0*	0*	0*	1.14E+02	0*
Contribution to non hazardous waste disposed	kg	7.59E+02	0*	0*	0*	0*	0*	7.59E+02	0*
Contribution to radioactive waste disposed	kg	9.56E-02	0*	0*	0*	0*	0*	9.56E-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 v6.2.4, 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 :	ENVPEP121215EN_V3	Drafting rules	PCR-4-ed4-EN-2021 09 06
Date of issue	01-2025	Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
		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"			

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