

Product Environmental Profile

GVXL Backfeed Protection Cabinet





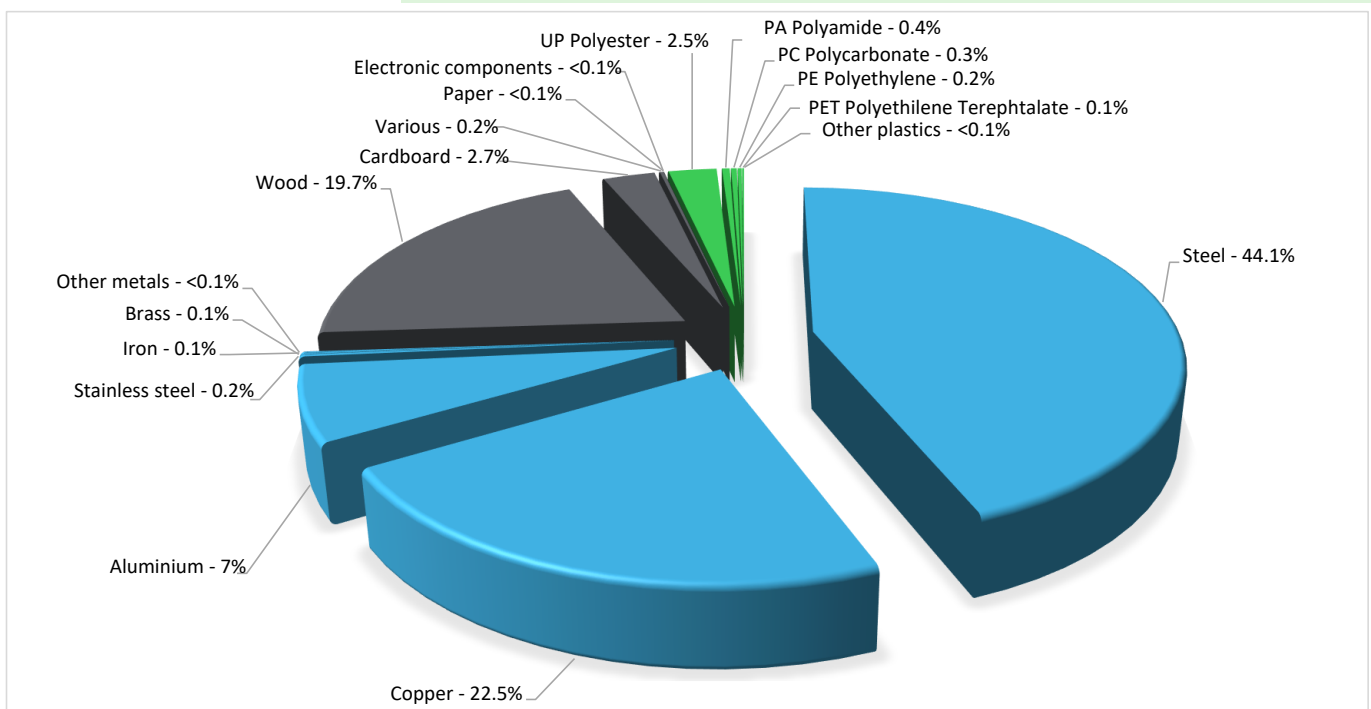
General information

Reference product	GVXL Backfeed Protection Cabinet - GVXLOPT001
Description of the product	Galaxy VXL Backfeed Protection Cabinet, single unit with top entry, maximum short circuit current 65kA Icc, 500-1250kW, 380/400/415V. Anti-reverse current function: In the event of a bypass power failure causing the UPS to switch to battery power supply, the reverse current protection cabinet can detect and block any reverse current flowing back into the bypass, thereby preventing unintended energy feedback.
Description of the range	Single product
Functional unit	Protect people from direct contact with live active parts and ensure the grouping of control, command and protection devices in a single enclosure or cabinet having the following dimensions 1970mm x 1200mm x 1000mm, while protecting them against the penetration of solid objects and liquids (IP20), according to the appropriate use scenario, and for the reference service life of the product of 20 years.



Constituent materials

Reference product mass	356.5 kg including the product, its packaging, additional elements and accessories
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Plastics	3.4%
Metals	74.0%
Others	22.6%



Substance assessment

RoHS compliance	Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) on restriction of lead, mercury, cadmium, hexavalent chromium or flame retardants -PBB&PBDE or phthalates-DEHP, BBP, DBP, DIBP.
REACH compliance	Products of this range are designed in conformity with the requirements of the REACH 1907/2006 regulation and its latest updates.
Battery Directive compliance	The battery within this product range are designed in conformity with the requirements of the Battery and Accumulator Directive (European Directive 2006/66/EC of 26 September 2006).

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:	94%	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECY'LAB 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).
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Environmental impacts

Reference service life time	20 years		
Product category	Unequipped cabinets		
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 need specific tools or services, only packaging of the product needs to be eliminated.		
Use scenario	Energy consumption of this cabinet is contributed from one switch with 246.67 W power dissipation per pole and one circuit breaker which power dissipation per pole is 4.50 W. Load rate is 50% of In. Use time rate is 30% RSL. Power losses = power dissipation * number of pole * 0.5 ²		
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	
	India	Europe	
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
			[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>

The calculation result is scientific counting method. For example, $1.37E+06=1.37*10^6=1370000$, $1.64E-04=1.64*10^(-4)=0.000164$

Mandatory Indicators		GVXL Backfeed Protection Cabinet - GVXLOPT001						
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	6.25E+03	1.55E+03	1.65E+02	1.81E+02	3.96E+03	3.90E+02	-1.07E+03
Contribution to climate change-fossil	kg CO2 eq	6.10E+03	1.61E+03	1.65E+02	6.22E+01	3.88E+03	3.86E+02	-1.08E+03
Contribution to climate change-biogenic	kg CO2 eq	1.49E+02	0*	0*	1.19E+02	8.75E+01	4.41E+00	1.65E+01
Contribution to climate change-land use and land use change	kg CO2 eq	2.05E-03	1.92E-03	0*	0*	0*	1.30E-04	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	4.99E-04	3.23E-04	1.46E-04	2.41E-07	1.70E-05	1.29E-05	-1.86E-04
Contribution to acidification	mol H+ eq	4.82E+01	2.47E+01	7.19E-01	6.16E-02	2.07E+01	1.99E+00	-1.86E+01
Contribution to eutrophication, freshwater	kg P eq	1.50E-02	3.95E-03	1.94E-05	4.53E-04	9.49E-03	1.11E-03	-2.53E-03
Contribution to eutrophication, marine	kg N eq	4.82E+00	1.67E+00	3.30E-01	2.55E-02	2.43E+00	3.62E-01	-7.34E-01
Contribution to eutrophication, terrestrial	mol N eq	6.55E+01	1.86E+01	3.58E+00	2.25E-01	3.89E+01	4.15E+00	-8.40E+00
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.68E+01	6.77E+00	1.17E+00	6.70E-02	7.70E+00	1.14E+00	-3.55E+00
Contribution to resource use, minerals and metals	kg Sb eq	3.11E-01	3.10E-01	0*	0*	1.28E-03	4.54E-05	-3.18E-01
Contribution to resource use, fossils	MJ	1.48E+05	4.48E+04	2.06E+03	1.58E+02	9.50E+04	5.63E+03	-2.15E+04
Contribution to water use	m3 eq	9.51E+02	5.76E+02	8.39E+00	5.31E+00	3.00E+02	6.08E+01	-9.52E+02

Inventory flows Indicators		GVXL Backfeed Protection Cabinet - GVXLOPT001						
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 renewable primary energy used as energy	MJ	2.39E+04	9.89E+02	0*	3.25E+02	2.23E+04	3.63E+02	-6.17E+02
Contribution to renewable primary energy used as raw material	MJ	1.87E+03	1.87E+03	0*	0*	0*	0*	-5.58E+02
Contribution to total renewable primary energy	MJ	2.58E+04	2.86E+03	0*	3.25E+02	2.23E+04	3.63E+02	-1.18E+03
Contribution to non renewable primary energy used as energy	MJ	1.47E+05	4.44E+04	2.06E+03	1.58E+02	9.50E+04	5.63E+03	-2.15E+04
Contribution to non renewable primary energy used as raw material	MJ	4.70E+02	4.70E+02	0*	0*	0*	0*	-1.05E+01
Contribution to total non renewable primary energy	MJ	1.48E+05	4.48E+04	2.06E+03	1.58E+02	9.50E+04	5.63E+03	-2.15E+04
Contribution to use of secondary material	kg	7.64E+00	7.64E+00	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 fresh water	m³	2.27E+01	1.35E+01	1.95E-01	1.69E-01	7.02E+00	1.85E+00	-2.22E+01
Contribution to hazardous waste disposed	kg	2.15E+04	2.14E+04	0*	0*	1.09E+02	3.73E+00	-2.49E+04
Contribution to non hazardous waste disposed	kg	2.45E+03	1.51E+03	0*	5.76E+01	5.97E+02	2.82E+02	-1.06E+03
Contribution to radioactive waste disposed	kg	1.18E+00	9.91E-01	3.29E-02	2.41E-03	1.41E-01	1.54E-02	-6.73E-01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	3.22E+02	3.19E+01	0*	2.90E+01	0*	2.61E+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	3.30E+01	6.76E+00	0*	2.34E+01	0*	2.90E+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 2.99E+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		GVXL Backfeed Protection Cabinet - GVXLOPT001							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	3.96E+03	0*	0*	0*	0*	0*	3.96E+03	0*
Contribution to climate change-fossil	kg CO2 eq	3.88E+03	0*	0*	0*	0*	0*	3.88E+03	0*
Contribution to climate change-biogenic	kg CO2 eq	8.75E+01	0*	0*	0*	0*	0*	8.75E+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	1.70E-05	0*	0*	0*	0*	0*	1.70E-05	0*
Contribution to acidification	mol H+ eq	2.07E+01	0*	0*	0*	0*	0*	2.07E+01	0*
Contribution to eutrophication, freshwater	kg P eq	9.49E-03	0*	0*	0*	0*	0*	9.49E-03	0*
Contribution to eutrophication marine	kg N eq	2.43E+00	0*	0*	0*	0*	0*	2.43E+00	0*
Contribution to eutrophication, terrestrial	mol N eq	3.89E+01	0*	0*	0*	0*	0*	3.89E+01	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	7.70E+00	0*	0*	0*	0*	0*	7.70E+00	0*
Contribution to resource use, minerals and metals	kg Sb eq	1.28E-03	0*	0*	0*	0*	0*	1.28E-03	0*
Contribution to resource use, fossils	MJ	9.50E+04	0*	0*	0*	0*	0*	9.50E+04	0*
Contribution to water use	m3 eq	3.00E+02	0*	0*	0*	0*	0*	3.00E+02	0*

Inventory flows Indicators		GVXL Backfeed Protection Cabinet - GVXLOPT001							
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	2.23E+04	0*	0*	0*	0*	0*	2.23E+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	2.23E+04	0*	0*	0*	0*	0*	2.23E+04	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.50E+04	0*	0*	0*	0*	0*	9.50E+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	9.50E+04	0*	0*	0*	0*	0*	9.50E+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	m ³	7.02E+00	0*	0*	0*	0*	0*	7.02E+00	0*
Contribution to hazardous waste disposed	kg	1.09E+02	0*	0*	0*	0*	0*	1.09E+02	0*
Contribution to non hazardous waste disposed	kg	5.97E+02	0*	0*	0*	0*	0*	5.97E+02	0*
Contribution to radioactive waste disposed	kg	1.41E-01	0*	0*	0*	0*	0*	1.41E-01	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 2025-04 in compliance with ISO14044, EF3.1 method is applied, for biogenic carbon storage, assessment methodology -1/1 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 :	ENVPEP2512009_V1	Drafting rules	PEP-PCR-ed4-2021 09 06
Date of issue	2025/12/30	Supplemented by Information and reference documents	PSR-0005-ed3.1-EN-2023 12 08 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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ENVPEP2512009_V1

Published by Schneider Electric

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12-2025