

Product Environmental Profile

Galaxy VS Maintenance Bypass Cabinet, UL, Single-Unit 10-40kW 208V, 20-80kW 480V

Representative of all Maintenance Bypass Cabinets for Galaxy V and Easy series





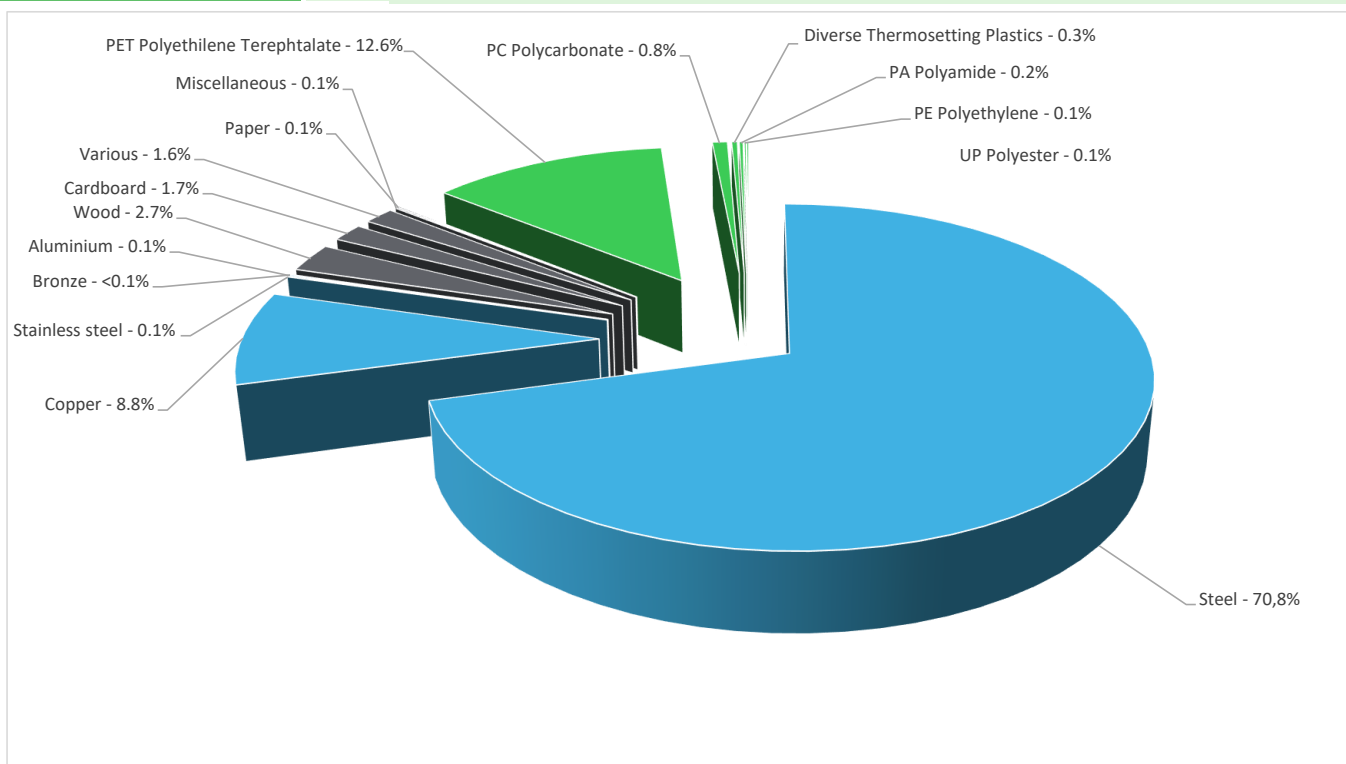
General information

Reference product	Galaxy VS Maintenance Bypass Cabinet, UL, Single-Unit 10-40kW 208V, 20-80kW 480V - GVSBPUSU80G
Description of the product	The Maintenance Bypass Cabinet provides complete isolation of a Galaxy UPS (10-40kW 208V, 20-80kW 480V) during service operations.
Description of the range	The products of the ranges are all Maintenance Bypass Cabinets for Galaxy V and Easy series including: E3SBPSU10K20F; E3MBP60K400H; E3MBPAR60K200H; E3SBPAR10K40F; GVSBP10K30H; GVSBP40K50H; GVSBP60K120H; E3SBPSU30K40F; GVSBP10K20H; GVSBP60G-WP; GVSBP20K60H; GVSBP80K120H; GVSBP150KH; GVSBP100G-WP; GVSBP80G; GVSBPIT75; GVSBP150G; GVSBP100T; GVLMBCA200K500G; GVLMBCA200K500H
Functional unit	To electrically isolate the UPS system (from 20 to 80 kW) in case of maintenance needs during 15 years.
Specifications are:	Power (W) : from 20 to 80kW Un = 480V



Constituent materials

Reference product mass 110 kg including the product, its packaging, additional elements and accessories



Plastics	14.1%
Metals	79.7%
Others	6.2%



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:	96%	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	15 years		
Product category	Maintenance Bypass Cabinet		
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	No special components needed		
Use scenario	2 breakers at 50% load, and at 100% use rate during 15 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	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>

Mandatory Indicators		Galaxy VS Maintenance Bypass Cabinet, UL, Single-Unit 10-40kW 208V, 20-80kW 480V - GVSFPSU80G						
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	1.23E+03	5.98E+02	2.82E+01	2.50E+01	4.66E+02	1.18E+02	-2.90E+02
Contribution to climate change-fossil	kg CO2 eq	1.22E+03	6.03E+02	2.82E+01	1.84E+01	4.56E+02	1.17E+02	-2.91E+02
Contribution to climate change-biogenic	kg CO2 eq	1.16E+01	-5.75E+00	0*	6.62E+00	1.03E+01	4.14E-01	5.23E-01
Contribution to climate change-land use and land use change	kg CO2 eq	2.25E-03	2.21E-03	0*	0*	0*	3.98E-05	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	2.02E-05	1.40E-05	4.33E-08	5.83E-08	2.00E-06	4.11E-06	-4.61E-05
Contribution to acidification	mol H+ eq	9.52E+00	6.24E+00	1.89E-01	2.29E-02	2.44E+00	6.35E-01	-3.08E+00
Contribution to eutrophication, freshwater	kg P eq	2.59E-03	9.67E-04	1.06E-05	1.72E-04	1.12E-03	3.25E-04	-4.69E-04
Contribution to eutrophication marine	kg N eq	1.47E+00	9.80E-01	8.91E-02	5.89E-03	2.85E-01	1.11E-01	-1.81E-01
Contribution to eutrophication, terrestrial	mol N eq	1.76E+01	1.07E+01	9.78E-01	6.09E-02	4.58E+00	1.26E+00	-2.11E+00
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.66E+00	3.14E+00	2.48E-01	1.37E-02	9.05E-01	3.53E-01	-8.09E-01
Contribution to resource use, minerals and metals	kg Sb eq	5.96E-02	5.94E-02	0*	0*	1.51E-04	1.60E-05	-1.01E-01
Contribution to resource use, fossils	MJ	3.89E+04	2.55E+04	3.94E+02	8.52E+01	1.12E+04	1.72E+03	-6.70E+03
Contribution to water use	m3 eq	3.30E+02	2.75E+02	1.07E-01	1.88E+00	3.53E+01	1.78E+01	-1.88E+02

Inventory flows Indicators		Galaxy VS Maintenance Bypass Cabinet, UL, Single-Unit 10-40kW 208V, 20-80kW 480V - GVSFPSU80G						
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	2.86E+03	1.20E+02	5.26E-01	2.78E+01	2.62E+03	9.56E+01	-8.44E+01
Contribution to use of renewable primary energy resources used as raw material	MJ	1.95E+02	1.95E+02	0*	0*	0*	0*	-3.81E+01
Contribution to total use of renewable primary energy resources	MJ	3.06E+03	3.15E+02	5.26E-01	2.78E+01	2.62E+03	9.56E+01	-1.23E+02

Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3.83E+04	2.49E+04	3.94E+02	8.52E+01	1.12E+04	1.72E+03	-6.70E+03
Contribution to use of non renewable primary energy resources used as raw material	MJ	5.65E+02	5.65E+02	0*	0*	0*	0*	-6.66E-03
Contribution to total use of non-renewable primary energy resources	MJ	3.89E+04	2.55E+04	3.94E+02	8.52E+01	1.12E+04	1.72E+03	-6.70E+03
Contribution to use of secondary material	kg	2.67E-03	2.67E-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	7.83E+00	6.41E+00	2.50E-03	5.22E-02	8.26E-01	5.42E-01	-4.39E+00
Contribution to hazardous waste disposed	kg	1.48E+03	1.47E+03	0*	0*	1.29E+01	1.14E+00	-7.93E+03
Contribution to non hazardous waste disposed	kg	2.91E+02	1.13E+02	9.92E-01	1.16E+01	7.03E+01	9.52E+01	-2.29E+02
Contribution to radioactive waste disposed	kg	8.68E-02	6.44E-02	7.07E-04	5.60E-04	1.66E-02	4.63E-03	-1.06E-01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	9.65E+01	1.05E+01	0*	7.64E+00	0*	7.84E+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	2.11E+00	3.55E-01	0*	9.83E-01	0*	7.76E-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	1.83E+00

* 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		Galaxy VS Maintenance Bypass Cabinet, UL, Single-Unit 10-40kW 208V, 20-80kW 480V - GVSBP80G							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	4.66E+02	0*	0*	0*	0*	0*	4.66E+02	0*
Contribution to climate change-fossil	kg CO2 eq	4.56E+02	0*	0*	0*	0*	0*	4.56E+02	0*
Contribution to climate change-biogenic	kg CO2 eq	1.03E+01	0*	0*	0*	0*	0*	1.03E+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	2.00E-06	0*	0*	0*	0*	0*	2.00E-06	0*
Contribution to acidification	mol H+ eq	2.44E+00	0*	0*	0*	0*	0*	2.44E+00	0*
Contribution to eutrophication, freshwater	kg P eq	1.12E-03	0*	0*	0*	0*	0*	1.12E-03	0*
Contribution to eutrophication marine	kg N eq	2.85E-01	0*	0*	0*	0*	0*	2.85E-01	0*
Contribution to eutrophication, terrestrial	mol N eq	4.58E+00	0*	0*	0*	0*	0*	4.58E+00	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	9.05E-01	0*	0*	0*	0*	0*	9.05E-01	0*
Contribution to resource use, minerals and metals	kg Sb eq	1.51E-04	0*	0*	0*	0*	0*	1.51E-04	0*
Contribution to resource use, fossils	MJ	1.12E+04	0*	0*	0*	0*	0*	1.12E+04	0*
Contribution to water use	m3 eq	3.53E+01	0*	0*	0*	0*	0*	3.53E+01	0*

Inventory flows Indicators		Galaxy VS Maintenance Bypass Cabinet, UL, Single-Unit 10-40kW 208V, 20-80kW 480V - GVSBP80G							
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	2.62E+03	0*	0*	0*	0*	0*	2.62E+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	2.62E+03	0*	0*	0*	0*	0*	2.62E+03	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.12E+04	0*	0*	0*	0*	0*	1.12E+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	1.12E+04	0*	0*	0*	0*	0*	1.12E+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	8.26E-01	0*	0*	0*	0*	0*	8.26E-01	0*
Contribution to hazardous waste disposed	kg	1.29E+01	0*	0*	0*	0*	0*	1.29E+01	0*
Contribution to non hazardous waste disposed	kg	7.03E+01	0*	0*	0*	0*	0*	7.03E+01	0*
Contribution to radioactive waste disposed	kg	1.66E-02	0*	0*	0*	0*	0*	1.66E-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*

