Product Environmental Profile

Easy UPS 3L

General information

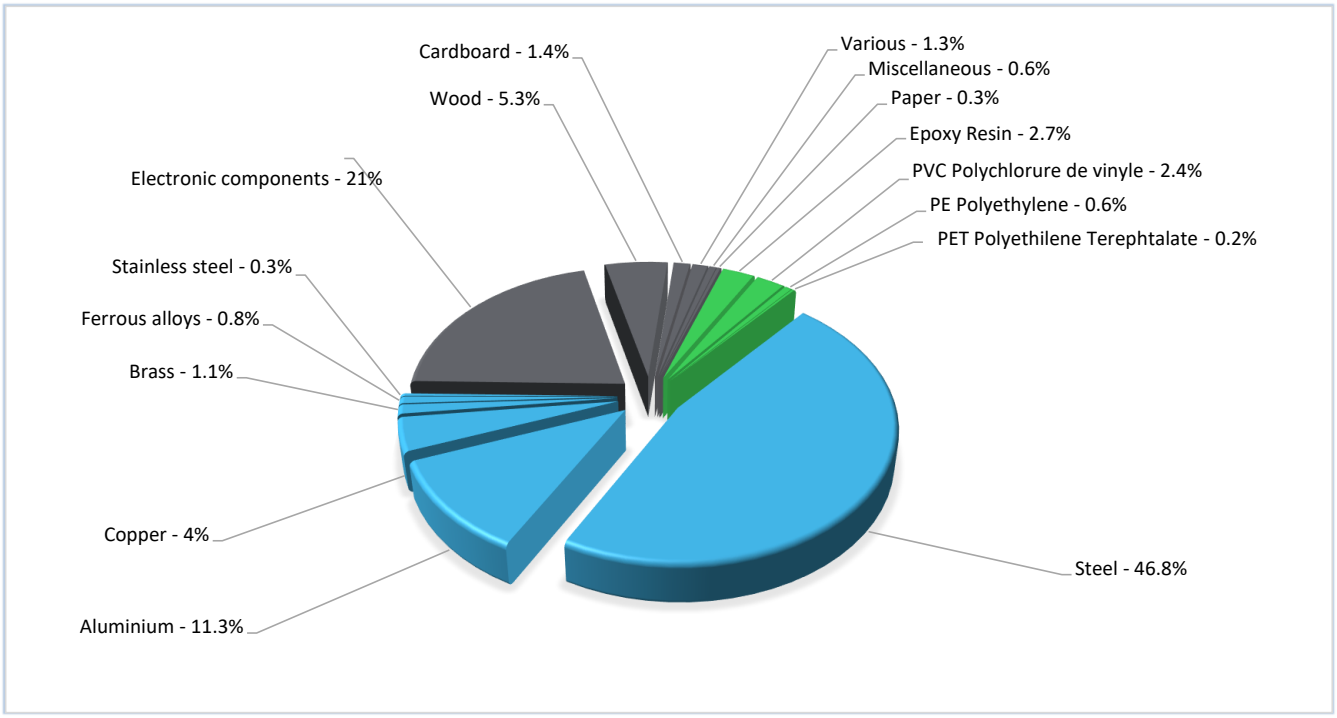
Reference product	Easy UPS 3L 500kVA 400V 3:3 UPS - E3LUPS500KH
Description of the product	The Schneider Electric Easy UPS 3L is an easy-to-configure, easy-to-use, and easy-to-service 250-600 kVA (400 V) 3 phase UPS that delivers high availability and predictability to medium and large commercial buildings and light industrial applications.
Description of the range	Easy 3L 250-600 kVA (400V) 3 phase UPS The representative product is Easy UPS 3L 500 kVA 400 V

Type	Net weight (kg)	Weight with packaging (kg)	Dimension (mm) HxWxD	Output performance classification	UPS rating (PF=1)
Easy UPS 3L 250 kVA 400 V, Start-up 5x8	425	470	1970x600x850	VFI-SS-111	250 kW/kVA
Easy UPS 3L 300 kVA 400 V, Start-up 5x8	449	503	1970x600x850		300 kW/kVA
Easy UPS 3L 400 kVA 400 V, Start-up 5x8	538	584	1970x600x850		400 kW/kVA
Easy UPS 3L 500 kVA 400 V, Start-up 5x8	**640**	**688**	**1970x1000x850**		**500 kW/kVA**
Easy UPS 3L 600 kVA 400 V, Start-up 5x8	745	800	1970x1000x850		600 kW/kVA

	The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.
Functional unit	To protect the load of 500kW against input power failure during 15 years and switch to the energy storage system to avoid power outage.

Constituent materials

Reference product mass	688 kg	including the product, its packaging and additional elements and accessories



	Plastics	5.90%
	Metals	64.30%
	Others	29.80%

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 Green Premium website
https://www.se.com/ww/en/work/support/green-premium/

Additional environmental information

End Of Life	Recyclability potential:	**68%**	Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

Reference service life time	15 years
Installation elements	The disposal of the packaging materials is accounted for 7% during the installation phase (including transport to disposal).
Use scenario	Power consumption conforms to the requirements in PSR0010-ed1.1-EN-2015_10_16_UPS:

Load rate	25%	50%	75%	100%
Proportion of time at specified load	0.25	0.5	0.25	0

The referent UPS is modeled to operate in normal mode (average efficiency of 95.3% and annual use of 103,916kWh) 100% of the time after 15 years.

Type (400V UPS system)	Average energy efficiency	Electricity consumption (kWh over 15 years)
Easy UPS 3L 250 kVA 400 V, Start-up 5x8	95.3%	774,849
Easy UPS 3L 300 kVA 400 V, Start-up 5x8	95.3%	916,515
Easy UPS 3L 400 kVA 400 V, Start-up 5x8	95.4%	1,226,619
Easy UPS 3L 500 kVA 400 V, Start-up 5x8	95.3%	1,558,733
Easy UPS 3L 600 kVA 400 V, Start-up 5x8	95.4%	1,830,074

Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production.			
Geographical representativeness	Europe			
Energy model used	**[A1 - A3]**	**[A5]**	**[B6]**	**[C1 - C4]**
	Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), 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			**Easy UPS 3L - E3LUPS500KH**					
Impact indicators	**Unit**	**Total**	**Manufacturing [A1 - A3]**	**Distribution [A4]**	**Installation [A5]**	**Use [B1 - B7]**	**End of Life [C1 - C4]**	**Benefits** [D]**
Contribution to climate change	kg CO2 eq	6.51E+05	1.09E+04	1.98E+02	0*	6.39E+05	1.14E+03	-4.68E+04
Contribution to climate change-fossil	kg CO2 eq	6.50E+05	1.07E+04	1.98E+02	7.42E+01	6.38E+05	1.13E+03	-4.60E+04
Contribution to climate change-biogenic	kg CO2 eq	9.87E+02	1.47E+02	0*	0*	8.52E+02	7.75E+00	-7.73E+02
Contribution to climate change-land use and land use change	kg CO2 eq	1.64E-04	3.95E-05	0*	2.79E-05	0*	9.62E-05	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	4.56E-03	1.64E-03	1.75E-04	1.71E-06	2.73E-03	1.26E-05	-7.29E-03
Contribution to acidification	mol H+ eq	3.75E+03	9.95E+01	8.62E-01	0*	3.65E+03	5.26E+00	-3.30E+02
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	1.98E+00	2.94E-02	0*	5.07E-04	1.75E+00	2.06E-01	-1.31E-01
Contribution to eutrophication marine	kg N eq	4.29E+02	1.26E+01	3.96E-01	0*	4.14E+02	1.47E+00	-2.63E+01
Contribution to eutrophication, terrestrial	mol N eq	6.37E+03	1.38E+02	4.29E+00	0*	6.22E+03	8.71E+00	-2.98E+02
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.38E+03	4.32E+01	1.41E+00	0*	1.33E+03	3.00E+00	-1.05E+02
Contribution to resource use, minerals and metals	kg Sb eq	1.27E+00	1.22E+00	0*	0*	4.63E-02	5.81E-03	-7.06E+00
Contribution to resource use, fossils	MJ	1.65E+07	1.71E+05	2.41E+03	0*	1.63E+07	7.36E+04	-8.11E+05
Contribution to water use	m3 eq	3.95E+04	3.39E+03	1.01E+01	1.72E+01	2.26E+04	1.35E+04	-1.63E+04

Additional indicators for the French regulation are available as well

Inventory flows Indicators		Easy UPS 3L - E3LUPS500KH						
Inventory flows	Unit	Total	Manufact. [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits** [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3.13E+06	3.77E+03	0*	0*	3.13E+06	0*	-1.91E+04
Contribution to use of renewable primary energy resources used as raw material	MJ	1.03E+03	1.03E+03	0*	0*	0*	0*	-4.23E+02
Contribution to total use of renewable primary energy resources	MJ	3.13E+06	4.79E+03	0*	0*	3.13E+06	0*	-1.96E+04
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.65E+07	1.68E+05	2.41E+03	0*	1.63E+07	7.36E+04	-8.09E+05
Contribution to use of non renewable primary energy resources used as raw material	MJ	2.71E+03	2.71E+03	0*	0*	0*	0*	-2.16E+03
Contribution to total use of non-renewable primary energy resources	MJ	1.65E+07	1.71E+05	2.41E+03	0*	1.63E+07	7.36E+04	-8.11E+05
Contribution to use of secondary material	kg	3.05E-02	3.05E-02	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	m^3	9.57E+02	7.89E+01	2.34E-01	4.00E-01	5.26E+02	3.51E+02	-3.80E+02
Contribution to hazardous waste disposed	kg	5.62E+04	4.37E+04	0*	0*	1.19E+04	5.85E+02	-5.60E+05
Contribution to non hazardous waste disposed	kg	9.71E+04	5.04E+03	0*	1.02E+02	9.19E+04	6.35E+01	-5.50E+04
Contribution to radioactive waste disposed	kg	2.23E+01	2.98E+00	3.94E-02	1.10E-02	1.92E+01	1.53E-02	-3.77E+01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	4.77E+02	1.91E+00	0*	2.79E+01	0*	4.47E+02	0.00E+00
Contribution to materials for energy recovery	kg	1.45E-06	1.45E-06	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	2.59E+01	2.43E+00	0*	2.34E+01	0*	0*	0.00E+00
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

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

*** Net benefits and loads beyond the system boundaries stage (module D): potential for reuse, recovery and/or recycling, expressed as net benefits and impacts.* ***Not accounted in the Total.***

****The calculation result is scientific counting method. For example, 1.37E+06=1.37*10^6=1,370,000, 1.64E-04=1.64*10^(-4)=0.000164*

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

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.

Extrapolated data

400V UPS system		Easy UPS 3L 250-600 kVA				
					Referent product	
	kW rating	250	300	400	**500**	600
Product information	Weight with Packaging (kg)	470	503	584	**688**	800
Compulsory environmental indicators Total of Life Cycle Phases UPS in normal mode (double conversion)	Contribution to climate change (kg CO2 eq)	3.26E+05	3.84E+05	5.13E+05	**6.51E+05**	7.64E+05
	Contribution to Ozone depletion (kg CFC11 eq)	2.56E-03	2.89E-03	3.64E-03	**4.56E-03**	5.25E-03
	Contribution to Acidification (mol H+ eq)	1.88E+03	2.22E+03	2.95E+03	**3.75E+03**	4.40E+03
	Contribution to eutrophication, freshwater (kg PO43- eq)	1.02E+00	1.19E+00	1.57E+00	**1.98E+00**	2.32E+00
	Contribution to eutrophication marine (kg N eq)	2.15E+02	2.54E+02	3.38E+02	**4.29E+02**	5.02E+02
	Contribution to eutrophication, terrestrial (mol N eq)	3.19E+03	3.77E+03	5.02E+03	**6.37E+03**	7.47E+03
	Contribution to photochemical ozone formation - human health (kg COVNM eq)	6.92E+02	8.15E+02	1.09E+03	**1.38E+03**	1.61E+03
	Contribution to resource use, minerals and metals (kgSbeq)	8.26E-01	8.87E-01	1.03E+00	**1.27E+00**	1.42E+00
	Total use of primary energy (MJ)	9.81E+06	1.16E+07	1.55E+07	**1.97E+07**	2.31E+07
	Contribution to water use (m3 eq)	2.23E+04	2.52E+04	3.16E+04	**3.95E+04**	4.54E+04

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Date of issue	2023/08/18	*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)

PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019

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

Document in compliance with ISO 14021 : 2016 « Environmental labels and declarations. Type II environmental declarations »

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