Product Environmental Profile

Lexium LEX18 Servo Drive 1500W

Servo system

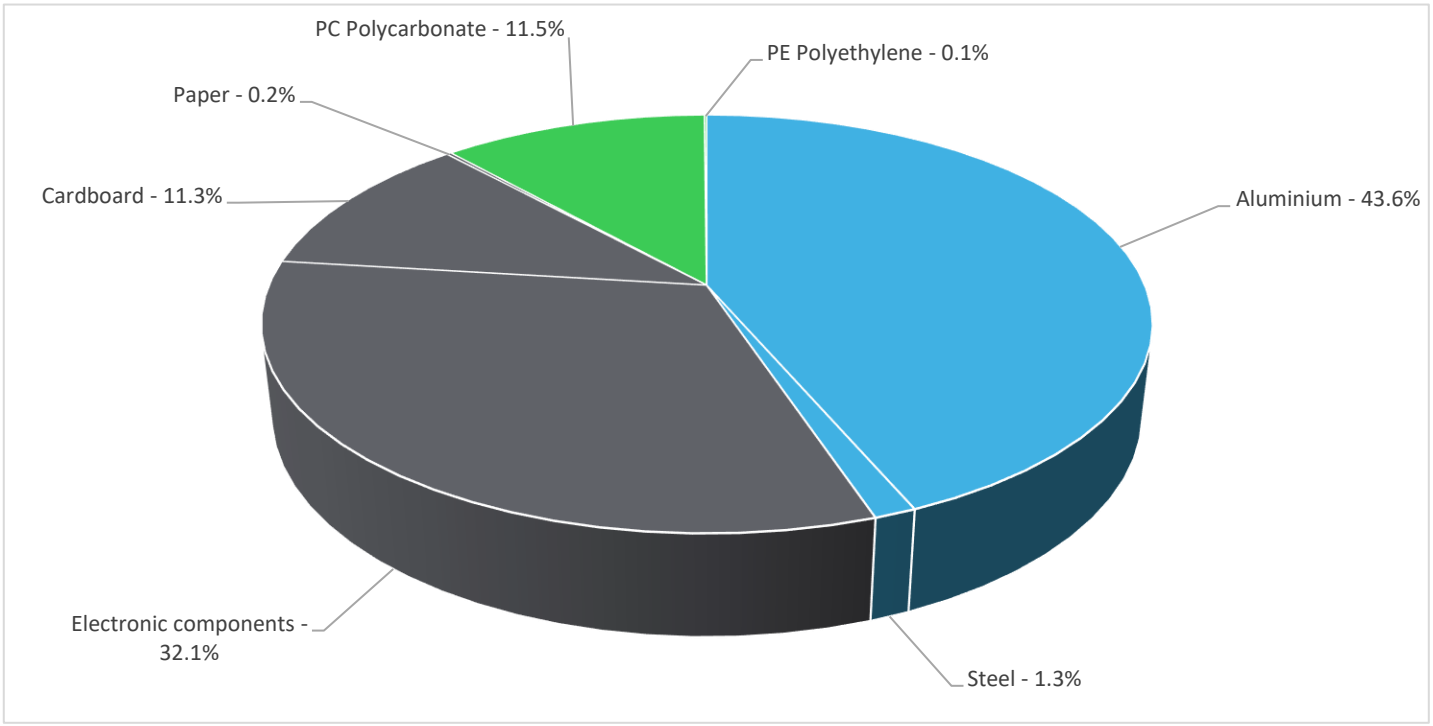
Schneider Electric

General information

Representative product	Lexium LEX18 Servo Drive 1500W - LXM18PDU15M2X
Description of the product	The main purpose of the LXM18 servo drive is the speed control and variation of BCH18 servo motor for general application,to achieve a high performance drive solution.
Description of the range	This range consists of products LXM18 servo drive, with power from 50w to 3000w for operation on 220V AC control supply 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	During the 10 years,Lexium LXM18 servo drive is provide a normal duty 1500W servo motor with its operating position, speed and torque suitable for the machine's operating point, in 220V power supply.

Constituent materials

Reference product mass	2020 g	including the product, its packaging and additional elements and accessories



	Plastics	11.6%
	Metals	44.9%
	Others	43.5%

Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

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/

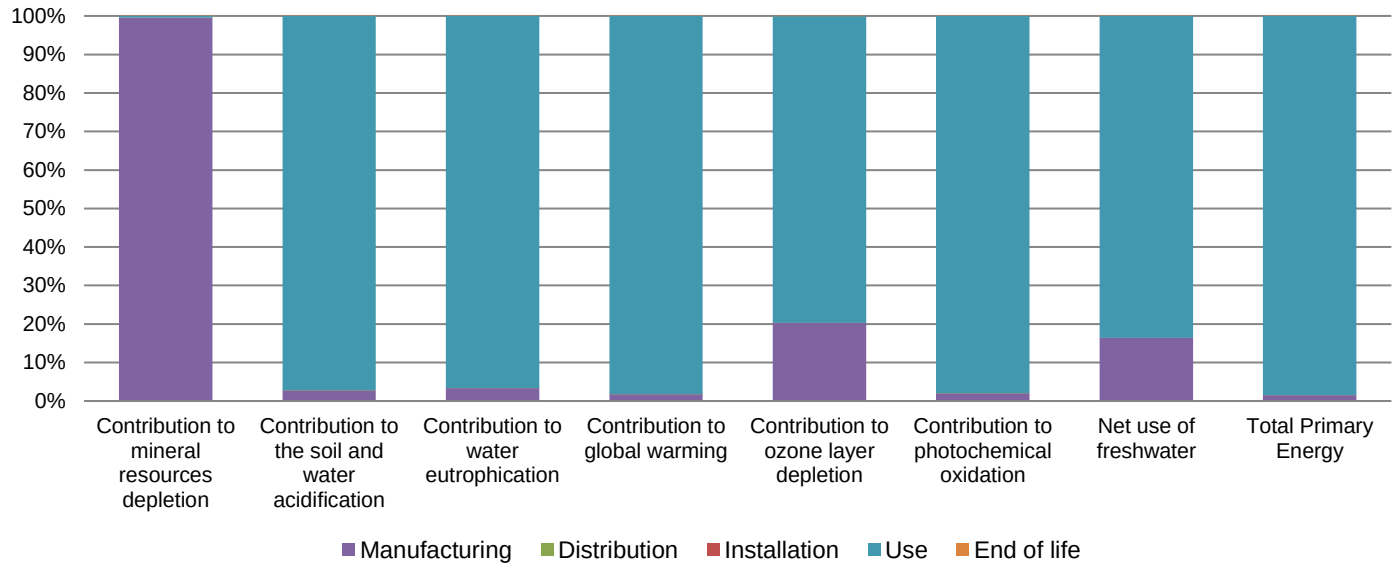
Additional environmental information

The Lexium LEX18 Servo Drive 1500W presents the following relevent environmental aspects	
Design	Products are designed to be "Green Premium".
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 230 g, consisting of Cardboard 148g (99.14%), PE film 1g (0.43%), paper 1g (0.43%) . Product distribution optimised by setting up local distribution centres
Installation	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.
Use	The product does not require special maintenance operations.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains Electronic Board (Communication) (154.63g) Electronic Board (Power) (255.20g) Electrolyte Capacitors (231.76g) Cable (10.51g) that should be separated from the stream of waste so as to optimize end-of-life treatment. The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website https://www.se.com/ww/en/work/support/green-premium/ Recyclability potential: **67%** Based on “ECO’DEEE recyclability and recoverability calculation method” (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

Reference life time	10 years			
Product category	Other equipments - Active product			
Installation elements	No special components needed			
Use scenario	The product is in active phase 80% of the time with a power use of 104.6W and in stand-by phase 20% of the time at 75% loading rate with a power use of 14.7W, for 10 years.			
Geographical representativeness	China			
Technological representativeness	The main purpose of the LXM18 servo drive is the speed control and variation of BCH18 servo motor for general application,to achieve a high performance drive solution.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: China	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN

Compulsory indicators	Lexium LEX18 Servo Drive 1500W - LXM18PDU15M2X						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	9.30E-03	9.27E-03	0*	0*	3.39E-05	0*
Contribution to the soil and water acidification	kg SO_2 eq	8.61E+00	2.38E-01	1.19E-03	0*	8.37E+00	0*
Contribution to water eutrophication	kg PO_4^{3-} eq	2.29E+00	7.73E-02	2.74E-04	0*	2.21E+00	3.63E-04
Contribution to global warming	kg CO_2 eq	7.86E+03	1.41E+02	0*	0*	7.72E+03	1.08E+00
Contribution to ozone layer depletion	kg CFC11 eq	7.71E-05	1.57E-05	0*	0*	6.14E-05	4.00E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	1.01E+00	2.05E-02	0*	0*	9.89E-01	0*
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.03E+01	1.69E+00	0*	0*	8.61E+00	0*
Total Primary Energy	MJ	1.28E+05	1.94E+03	0*	0*	1.26E+05	0*



Optional indicators	Lexium LEX18 Servo Drive 1500W - LXM18PDU15M2X						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.18E+05	1.61E+03	0*	0*	1.17E+05	0*
Contribution to air pollution	m^3	8.13E+05	1.21E+04	0*	0*	8.01E+05	0*
Contribution to water pollution	m^3	3.94E+05	1.00E+04	4.29E+01	0*	3.84E+05	6.11E+01
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.14E-01	2.14E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	6.56E+03	8.56E+01	0*	0*	6.48E+03	0*
Total use of non-renewable primary energy resources	MJ	1.22E+05	1.85E+03	0*	0*	1.20E+05	0*
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6.56E+03	8.49E+01	0*	0*	6.48E+03	0*
Use of renewable primary energy resources used as raw material	MJ	7.39E-01	7.39E-01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.22E+05	1.84E+03	0*	0*	1.20E+05	0*
Use of non renewable primary energy resources used as raw material	MJ	1.40E+01	1.40E+01	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Waste categories	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	3.59E+02	1.07E+02	0*	0*	2.49E+02	3.06E+00
Non hazardous waste disposed	kg	1.46E+03	5.94E+01	0*	0*	1.40E+03	0*
Radioactive waste disposed	kg	1.01E-01	5.51E-02	0*	0*	4.61E-02	2.26E-05

Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.56E+00	1.41E-01	0*	2.28E-01	0*	1.19E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	2.78E-01	0*	0*	0*	0*	2.78E-01
Exported Energy	MJ	7.24E-04	6.81E-05	0*	6.56E-04	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.9.4, database version 44562 in compliance with ISO14044.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

According to this environmental analysis, all the impacts (excepted “Mineral resources depletion”) of other products in this family may be proportionally extrapolated by energy consumption values.
For “Mineral resources depletion”, the impacts may be proportionally extrapolated by the products weights.

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	ENVPEP2301010_V1	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	03/2023	*Supplemented by*	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal X External

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 - Self-declared environmental claims (Type II environmental labelling) »

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