# **Product Environmental Profile**

#### **Lexium Cobot - Cobot Controller**







### **General information**

Representative product

Description of the range

Lexium Cobot - Cobot Controller - LXMRL03C1000

The Cobot Controller of the Lexium Cobot provides:

- · Power supply for the Lexium Cobot Arm
- · Interface to connect the Control Stick
- · Interface to operation terminal either via cable or WiFi connection
- Interfaces to several Inputs / Outputs of different kinds

A Control Stick is included in the scope of delivery of the Control Cabinet, which can be used for various operations. After commissioning is completed, the Control Stick is intended to control the Lexium Cobot Arm.

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.

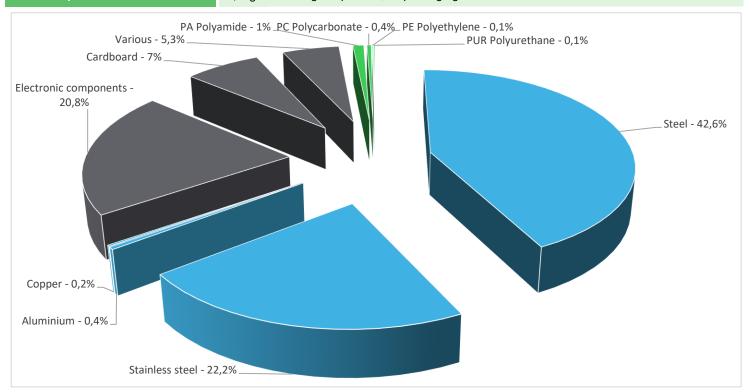
Functional unit

To power the "standard robot" up to 150W, in accordance with the relevant standards ,during 10 years.

## Constituent materials

Reference product mass

15,8kg including the product, its packaging and additional elements and accessories.



Plastics 1,6%

Metals 65,4%

Others 33,1%

# Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) 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), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate – BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website <a href="http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page">http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page</a>

## (19) Additional environmental information

The Lexium Cobot - Cobot Controller presents the following relevent environmental aspects							
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified						
	Weight and volume of the packaging optimized, based on the European Union's packaging directive						
Distribution	Packaging weight is 1817 g, consisting of cardboard (63,6%) cotton (35%) and plastic (1,4%)						
	Product distribution optimised by setting up local distribution centres						
Installation	The product does require some specific installation operations, refer to the user's manual.						
Use	The product does not require special maintenance operations.						
	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials						
	This product contains 6 electronic cards (642,95g) that should be separated from the stream of waste so as to optimize end-of-life treatment.						
End of life	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						
	http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page						
	Based on "ECO'DEEE recyclability and recoverability calculation method"  Recyclability potential: 86% (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).						

## **Environmental impacts**

Reference life time	10 years					
Installation elements	The product does require some specific installation operations, refer to the user's manual.					
Use scenario	The product is in active mode 60% of the time and Off mode 40% of the time with an Inputting voltage of 100-240VAC/10A, for 10 years.					
Geographical representativeness	Europe					
	Manufacturing	Installation	Use	End of life		
Energy model used	Energy model used: China	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27		

Compulsory indicators		Lexium Cob	ot - Cobot Contro	oller - LXMRL0	3C1000		
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	3,20E-02	3,16E-02	0*	0*	3,36E-04	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1,65E+01	3,47E-01	9,30E-03	0*	1,61E+01	4,46E-03
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1,08E+00	9,89E-02	2,14E-03	0*	9,73E-01	1,25E-03
Contribution to global warming	kg CO <sub>2</sub> eq	4,03E+03	1,64E+02	2,04E+00	0*	3,86E+03	2,47E+00
Contribution to ozone layer depletion	kg CFC11 eq	2,71E-04	1,94E-05	0*	0*	2,52E-04	1,23E-07
Contribution to photochemical oxidation	kg C₂H₄ eq	9,17E-01	3,06E-02	6,64E-04	0*	8,85E-01	4,66E-04
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1,40E+04	2,21E+01	0*	0*	1,40E+04	0*
Total Primary Energy	MJ	8,07E+04	3,52E+03	2,88E+01	0*	7,71E+04	2,24E+01
100%	bution to Con	tribution to	Contribution to C	Contribution to	Net use of	Total P	rimary
Contribution to Contribution to Contri mineral the soil and water w		tribution to (		Contribution to hotochemical oxidation	Net use of freshwater		

Optional indicators		Lexium Cob	ot - Cobot Contro	oller - LXMRL0	3C1000		
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4,56E+04	1,75E+03	2,86E+01	0*	4,38E+04	1,77E+01
Contribution to air pollution	m³	1,86E+05	1,92E+04	8,67E+01	0*	1,66E+05	1,57E+02
Contribution to water pollution	m³	1,72E+05	1,17E+04	3,35E+02	0*	1,59E+05	4,53E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2,59E+00	2,59E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	9,87E+03	6,30E+01	0*	0*	9,81E+03	0*
Total use of non-renewable primary energy resources	MJ	7,09E+04	3,46E+03	2,88E+01	0*	6,73E+04	2,23E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	9,84E+03	2,91E+01	0*	0*	9,81E+03	0*
Use of renewable primary energy resources used as raw material	MJ	3,39E+01	3,39E+01	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	7,08E+04	3,39E+03	2,88E+01	0*	6,73E+04	2,23E+01
Use of non renewable primary energy resources used as raw material	MJ	6,88E+01	6,88E+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

■Manufacturing ■Distribution ■Installation ■Use ■End of life

Hazardous waste disposed	kg	3,49E+02	3,30E+02	0*	0*	2,01E+00	1,70E+01
Non hazardous waste disposed	kg	1,45E+04	5,21E+01	0*	0*	1,44E+04	0*
Radioactive waste disposed	kg	9,64E+00	1,91E-02	0*	0*	9,62E+00	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1,51E+01	1,22E+00	0*	1,80E+00	0*	1,21E+01
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	2,87E-01	0*	0*	0*	0*	2,87E-01
Exported Energy	MJ	3,81E-01	3,78E-01	0*	3,15E-03	0*	0*

<sup>\*</sup> represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.8.1, database version 2016-11 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.

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.

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Date of issue	05/2023		
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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