# **Product Environmental Profile**

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







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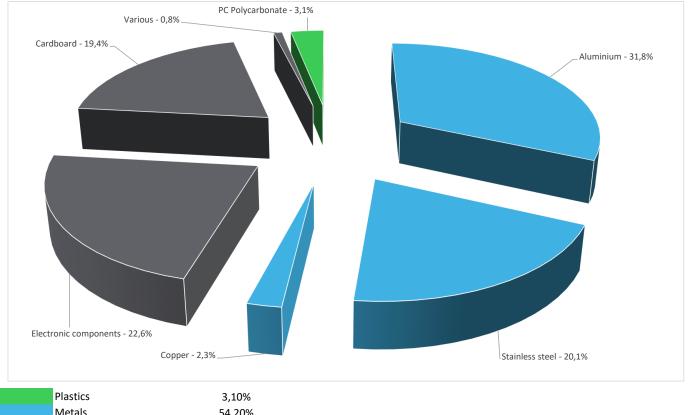
#### **General information**

Reference product	Lexium Cobot - Compact Controller - LXMRL00C2000
Description of the product	The Cobot Compact 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 Lexium Cobot Compact Controller, which can be used for various operations. After commissioning is completed, the Control Stick is intended to control the Lexium Cobot Arm.
Functional unit	To power the "standard robot" up to 150W, in accordance with the relevant standards, during 10 years.



### **Constituent materials**

Reference product mass 1933 g including the product, its packaging and additional elements and accessories



 Plastics
 3,10%

 Metals
 54,20%

 Others
 42,80%



Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website <a href="https://www.se.com/ww/en/work/support/green-premium/">https://www.se.com/ww/en/work/support/green-premium/</a>

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### (19) Additional environmental information

End Of Life

Recyclability potential:

66%

The recyclability rate was calculated from the recycling rates of each material making up the product with the exception of data using the ESR database. For materials or components using the ESR database or the absence of data the conservative hypothesis "0% recyclability" was used.

## **Environmental impacts**

Reference service life time	10 years									
Product category	Other equipments - Active product									
Installation elements	The product does not require any installation operations									
Use scenario	The product is in active mode 60% of the time and Off mode 40% of the time with a power use of 12W for 10 years.									
Time representativeness	The collected data are representative of the year	The collected data are representative of the year 2024								
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 représentaive of the actual type of technologies used to make the product.								
Geographical representativeness	Rest of the World									
Energy model used	[A1 - A3] Electricity Mix; High voltage; 2018; China, CN	[A5] Electricity Mix; Low voltage; 2018; Europe, EU-27	[B6] Electricity Mix; Low voltage; 2018; Europe, EU-27	[C1 - C4] Electricity Mix; Low voltage; 2018; Europe, EU-27						

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.schneiderelectric.com/contact

Mandatory Indicators			Lex	ium Cobot - Cor	npact Controller	- LXMRL00C200	0	
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	3,29E+02	6,38E+01	2,86E+00	0*	2,59E+02	3,35E+00	-7,19E+00
Contribution to climate change-fossil	kg CO2 eq	3,28E+02	6,34E+01	2,86E+00	0*	2,58E+02	3,34E+00	-7,01E+00
Contribution to climate change-biogenic	kg CO2 eq	7,08E-01	3,52E-01	0*	0*	3,45E-01	1,08E-02	-1,75E-01
Contribution to climate change-land use and land use change	kg CO2 eq	2,22E-06	2,22E-06	0*	0*	0*	0*	8,24E-05
Contribution to ozone depletion	kg CFC-11 eq	1,21E-05	8,47E-06	2,51E-06	0*	1,11E-06	1,96E-08	-7,32E-07
Contribution to acidification	mol H+ eq	2,11E+00	6,19E-01	1,17E-02	0*	1,48E+00	7,43E-03	-4,94E-02
Contribution to eutrophication, freshwater	kg (PO4)³- eq	1,72E-03	9,99E-04	3,33E-07	0*	7,08E-04	1,34E-05	-1,92E-05
Contribution to eutrophication marine	kg N eq	2,24E-01	4,86E-02	5,35E-03	9,33E-05	1,68E-01	2,07E-03	-3,46E-03
Contribution to eutrophication, terrestrial	mol N eq	3,12E+00	5,21E-01	5,80E-02	9,50E-04	2,52E+00	2,20E-02	-4,04E-02
Contribution to photochemical ozone formation - human health	kg COVNM eq	7,45E-01	1,80E-01	1,93E-02	2,28E-04	5,38E-01	6,66E-03	-1,34E-02
Contribution to resource use, minerals and metals	kg Sb eq	1,01E-02	1,01E-02	0*	0*	1,87E-05	0*	-1,97E-04
Contribution to resource use, fossils	MJ	7,52E+03	7,93E+02	3,54E+01	0*	6,59E+03	1,04E+02	-1,07E+02
Contribution to water use	m3 eq	7,74E+01	6,76E+01	1,44E-01	3,47E-02	9,15E+00	5,34E-01	-1,21E+00

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Inventory flows Indicators	Lex	ium Cobot - Con	npact Controller	- LXMRL00C200	0			
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	1,30E+03	3,07E+01	0*	0*	1,26E+03	0*	-6,57E+00
Contribution to use of renewable primary energy resources used as raw material	MJ	1,63E+00	1,63E+00	0*	0*	0*	0*	6,82E+00
Contribution to total use of renewable primary energy resources	MJ	1,30E+03	3,23E+01	0*	0*	1,26E+03	0*	2,55E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	7,52E+03	7,90E+02	3,54E+01	0*	6,59E+03	1,04E+02	-1,08E+02
Contribution to use of non renewable primary energy resources used as raw material	MJ	2,78E+00	2,78E+00	0*	0*	0*	0*	1,89E+00
Contribution to total use of non-renewable primary energy resources	MJ	7,52E+03	7,93E+02	3,54E+01	0*	6,59E+03	1,04E+02	-1,07E+02
Contribution to use of secondary material	kg	9,77E-01	9,77E-01	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	1,80E+00	1,57E+00	3,36E-03	8,08E-04	2,13E-01	1,24E-02	-2,72E-02
Contribution to hazardous waste disposed	kg	1,11E+02	1,06E+02	0*	0*	4,83E+00	4,50E-01	-1,78E+01
Contribution to non hazardous waste disposed	kg	6,75E+01	2,97E+01	0*	3,80E-01	3,72E+01	1,76E-01	-1,40E+01
Contribution to radioactive waste disposed	kg	2,67E-02	1,83E-02	5,66E-04	0*	7,79E-03	1,96E-05	-1,10E-02
Contribution to components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*	0,00E+00
Contribution to materials for recycling	kg	1,20E+00	1,59E-01	0*	0*	0*	1,04E+00	0,00E+00
Contribution to materials for energy recovery	kg	2,55E-08	2,55E-08	0*	0*	0*	0*	0,00E+00
Contribution to exported energy	MJ	1,19E-02	1,58E-03	0*	0*	0*	1,03E-02	0,00E+00
$^{\ast}$ represents less than 0.01% of the total life cycle of the refere	nce flow							
Contribution to biogenic carbon content of the product	kg of C	0,00E+00						
Contribution to biogenic carbon content of the associated	kg of C	1,06E-01						

Mandatory Indicators Lexium Cobot - Compact Control							ontroller	- LXMRL00C200	00
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	2,59E+02	0*	0*	0*	0*	0*	2,59E+02	0*
Contribution to climate change-fossil	kg CO2 eq	2,58E+02	0*	0*	0*	0*	0*	2,58E+02	0*
Contribution to climate change-biogenic	kg CO2 eq	3,45E-01	0*	0*	0*	0*	0*	3,45E-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	1,11E-06	0*	0*	0*	0*	0*	1,11E-06	0*
Contribution to acidification	mol H+ eq	1,48E+00	0*	0*	0*	0*	0*	1,48E+00	0*
Contribution to eutrophication, freshwater	kg (PO4)³- eq	7,08E-04	0*	0*	0*	0*	0*	7,08E-04	0*
Contribution to eutrophication marine	kg N eq	1,68E-01	0*	0*	0*	0*	0*	1,68E-01	0*
Contribution to eutrophication, terrestrial	mol N eq	2,52E+00	0*	0*	0*	0*	0*	2,52E+00	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	5,38E-01	0*	0*	0*	0*	0*	5,38E-01	0*
Contribution to resource use, minerals and metals	kg Sb eq	1,87E-05	0*	0*	0*	0*	0*	1,87E-05	0*
Contribution to resource use, fossils	MJ	6,59E+03	0*	0*	0*	0*	0*	6,59E+03	0*
Contribution to water use	m3 eq	9,15E+00	0*	0*	0*	0*	0*	9,15E+00	0*

1,06E-01

kg of C

packaging

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Inventory flows Indicators	Lexium Co	obot - Con	npact Co	ntroller	- LXMRL00C200	00			
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	1,26E+03	0*	0*	0*	0*	0*	1,26E+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	1,26E+03	0*	0*	0*	0*	0*	1,26E+03	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	6,59E+03	0*	0*	0*	0*	0*	6,59E+03	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	6,59E+03	0*	0*	0*	0*	0*	6,59E+03	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	2,13E-01	0*	0*	0*	0*	0*	2,13E-01	0*
Contribution to hazardous waste disposed	kg	4,83E+00	0*	0*	0*	0*	0*	4,83E+00	0*
Contribution to non hazardous waste disposed	kg	3,72E+01	0*	0*	0*	0*	0*	3,72E+01	0*
Contribution to radioactive waste disposed	kg	7,79E-03	0*	0*	0*	0*	0*	7,79E-03	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*

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

Life cycle assessment performed with EIME version v6.1, database version 2023-02 in compliance with ISO14044, EF 3.0 method is applied, for biogenic carbon storage, assessment methodology 0/0 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 :		Drafting rules	PCR-4-ed4-EN-2021 09 06
		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Date of issue	105-2024	Information and reference documents	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the de	eclaration 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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