# **Product Environmental Profile**

#### **CONTROLLER PROFIBUS 1,35 27A 24VDC**







### **General information**

Representative product

CONTROLLER PROFIBUS 1,35 27A 24VDC -LTMR27PBD

Description of the product

The product is a CONTROLLER PROFIBUS 1,35 27A 24VDC performs protection, measurement and supervision functions for single-phase and three-phase AC motors at constant speed in motor management system.

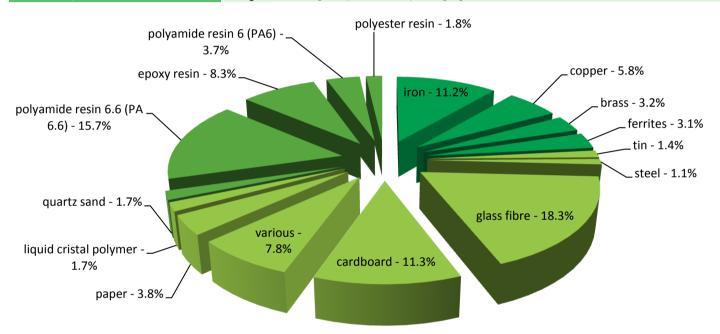
Functional unit

To perform protection, measurement and supervision functions for single-phase and three-phase AC motors at constant speed in motor management system for 8 years.

## Constituent materials

Reference product mass

880 g including the product, its packaging and additional elements and accessories



## 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

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this 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>



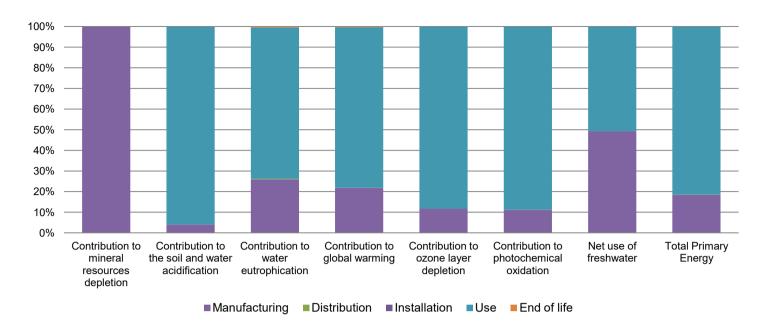
The CONTROLLER PROFIBUS 1,35 27A 24VDC presents the following relevent environmental aspects

Design						
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 140.7 g, consisting of cardboard (100g) and paper (40.7g)					
	Product distribution optimised by setting up local distribution centres					
Installation	Ref LTMR27PBD does not require any installation operations.					
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 PCBA bigger than 10cm² (190.1g) that should be separated from the stream of waste so as to optimize end-of-life treatment.					
End of life	ne location of these components and other recommendations are given in the End of Life Instruction document hich is available on the Schneider-Electric Green Premium website					
	http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page					
	Recyclability potential:  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	8 years						
Product category	Passive products - non-continuous operation						
Installation elements	No special components needed						
Use scenario	Product dissipation is 2.952 W full load, loading rate is 30% and service uptime percentage is 70%						
Geographical representativeness	Europe						
Technological representativeness	The product is a CONTROLLER PROFIBUS 1,35 27A 24VDC performs protection, measurement and supervision functions for single-phase and three-phase AC motors at constant speed in motor management system.						
	Manufacturing	Installation	Use	End of life			
Energy model used	Energy model used: China	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU- 27			

Compulsory indicators		CONTROLLI	ER PROFIBUS 1,3	5 27A 24VDC	- LTMR27PBC	)	
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	8.71E-03	8.71E-03	0*	0*	3.89E-06	0*
Contribution to the soil and water acidification	$kg SO_2 eq$	6.74E-01	2.69E-02	5.18E-04	0*	6.47E-01	3.00E-04
Contribution to water eutrophication	kg PO <sub>4</sub> ³- eq	3.30E-02	8.53E-03	1.19E-04	1.00E-05	2.42E-02	1.14E-04
Contribution to global warming	kg CO <sub>2</sub> eq	1.10E+02	2.39E+01	1.14E-01	1.35E-02	8.55E+01	3.00E-01
Contribution to ozone layer depletion	kg CFC11 eq	2.36E-05	2.77E-06	0*	0*	2.08E-05	1.41E-08
Contribution to photochemical oxidation	kg C₂H₄ eq	3.45E-02	3.83E-03	3.70E-05	4.43E-06	3.06E-02	2.74E-05
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4.40E-01	2.17E-01	0*	0*	2.23E-01	1.84E-04
Total Primary Energy	MJ	2.13E+03	3.92E+02	1.61E+00	2.31E-01	1.73E+03	1.53E+00



Optional indicators		CONTROLL	ER PROFIBUS 1,3	5 27A 24VDC	- LTMR27PBC		
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.18E+03	2.94E+02	1.60E+00	1.90E-01	8.81E+02	1.27E+00
Contribution to air pollution	m³	6.18E+03	2.49E+03	4.83E+00	1.49E+00	3.67E+03	9.75E+00
Contribution to water pollution	m³	5.77E+03	2.15E+03	1.87E+01	1.59E+00	3.59E+03	1.63E+01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	0.00E+00	0*	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1.34E+02	9.63E+00	0*	0*	1.24E+02	0*
Total use of non-renewable primary energy resources	MJ	1.99E+03	3.83E+02	1.60E+00	2.31E-01	1.61E+03	1.53E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.32E+02	7.57E+00	0*	0*	1.24E+02	0*
Use of renewable primary energy resources used as raw material	MJ	2.06E+00	2.06E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.98E+03	3.71E+02	1.60E+00	2.31E-01	1.61E+03	1.53E+00
Use of non renewable primary energy resources used as raw material	MJ	1.20E+01	1.20E+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	1.70E+01	1.51E+01	0*	2.82E-01	0*	1.65E+00
Non hazardous waste disposed	kg	3.24E+02	4.00E+00	0*	0*	3.20E+02	0*
Radioactive waste disposed	kg	2.66E-01	4.83E-03	0*	0*	2.61E-01	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	2.99E-02	1.38E-03	0*	0*	0*	2.85E-02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	7.14E-02	1.82E-03	0*	0*	0*	6.96E-02
Exported Energy	MJ	0.00E+00	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 EIME v5.5, database version 2015-04.

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

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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Validity period	5 years	Information and reference	www.pep-ecopassport.org

Independent verification of the declaration and data, in compliance with ISO 14025: 2010

Internal X External

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

Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental

declarations »

Schneider Electric Industries SAS

35, rue Joseph Monier
CS 30323
F- 92506 Rueil Malmaison Cedex
RCS Nanterre 954 503 439
Capital social 896 313 776 €

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