# **Product Environmental Profile**

#### **ELECTRIC VEHICLE CHARGING STATION**









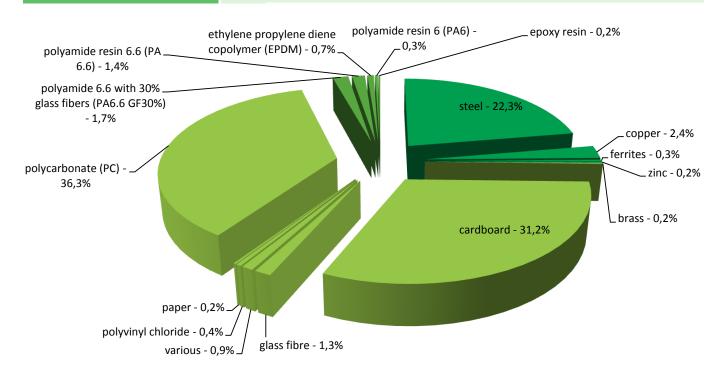
#### General information

Representative product	ELECTRIC VEHICLE CHARGING STATION -EVF2S22P44R
Description of the product	The EVlink Parking charging station product is designed to charge the electric vehicle and meet the requirements of secure parking lots (closed, with filtered access, or under surveillance): Parking lots for vehicle fleets; Paid-access car parts; Shopping mall parking lots The stations can be installed outdoors or indoors.  The representative product used for the analysis is EVF2S22P44R (Floor-standing / 22kW / 2x T2S socket-outlet / RFID reader).
Functional unit	Charging an electrical vehicle with power 22 kW, with RFID reader, with 2 x T2S outlet during 10 years.

## Constituent materials

Reference product mass

50700 g including the product, its packaging and additional elements and accessories



### **I** 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>

## (1) Additional environmental information

The ELECTRIC VEHICLE CHARGING STATION 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 13948 g, consisting of Cardboard (96%), Paper (4%)					
	Product distribution optimised by setting up local distribution centres					
Installation	Ref EVF2S22P44R 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 (342g) , PCBA TI (194) 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					
	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	10 years					
Product category	Passive products - non-continuous operation					
Installation elements	No special components needed					
Use scenario	Product dissipation is 100 W full load, loading rate is 30% and service uptime percentage is 30%  The product is in active mode 50 % of the time with a power use of 100 W and in stand-by mode 50 % of the time with a power use of 33 W, for 10 years					
Geographical representativeness	France					
Technological representativeness	The EVlink Parking charging station product is designed to charge the electric vehicle and meet the requirements of secure parking lots (closed, with filtered access, or under surveillance): Parking lots for vehicle fleets; Paid-access car parts; Shopping mall parking lots The stations can be installed outdoors or indoors.  The representative product used for the analysis is EVF2S22P44R (Floor-standing / 22kW / 2x T2S socket-outlet / RFID reader).					
	Manufacturing	Installation	Use	End of life		

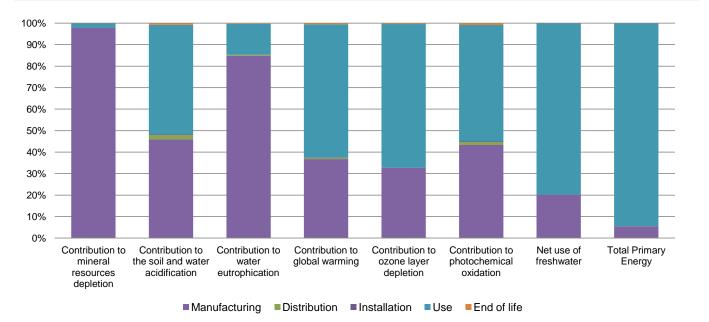
Energy model used

Energy model used: France

Electricity mix; AC; consumption mix, at consumer; 230V; FR Electricity mix; AC; consumption mix, at consumer; 230V; FR

Electricity mix; AC; consumption mix, at consumer; 230V; FR

Compulsory indicators	ELECTRIC VEHICLE CHARGING STATION - EVF2S22P44R						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	8,95E-03	8,76E-03	0*	0*	1,95E-04	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1,50E+00	6,88E-01	2,99E-02	3,99E-03	7,64E-01	1,17E-02
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1,46E+00	1,24E+00	6,88E-03	9,38E-04	2,12E-01	3,14E-03
Contribution to global warming	kg CO <sub>2</sub> eq	1,07E+03	3,95E+02	6,54E+00	1,30E+00	6,66E+02	5,65E+00
Contribution to ozone layer depletion	kg CFC11 eq	7,50E-05	2,45E-05	1,33E-08	8,15E-08	5,02E-05	2,80E-07
Contribution to photochemical oxidation	$kg C_2H_4 eq$	1,51E-01	6,56E-02	2,13E-03	4,33E-04	8,21E-02	1,24E-03
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1,57E+01	3,17E+00	0*	1,58E-03	1,25E+01	5,36E-03
Total Primary Energy	MJ	8,65E+04	4,73E+03	8,77E+01	1,96E+01	8,16E+04	5,71E+01



Optional indicators		ELECTRIC VEHICLE CHARGING STATION - EVF2S22P44R					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1,44E+04	5,01E+03	9,19E+01	1,84E+01	9,18E+03	5,33E+01
Contribution to air pollution	m³	8,09E+04	3,05E+04	2,78E+02	1,42E+02	4,96E+04	4,14E+02
Contribution to water pollution	m³	1,69E+05	1,31E+05	1,08E+03	1,52E+02	3,64E+04	8,37E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	6,00E+00	6,00E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	1,62E+02	1,49E+02	1,23E-01	2,27E-02	1,30E+01	6,43E-02
Total use of non-renewable primary energy resources	MJ	8,63E+04	4,58E+03	8,76E+01	1,96E+01	8,16E+04	5,70E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	-9,21E+01	-1,05E+02	0*	0*	0*	0*
Use of renewable primary energy resources used as raw material	MJ	2,54E+02	2,54E+02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	8,57E+04	3,93E+03	8,76E+01	1,96E+01	8,16E+04	5,70E+01

Use of non renewable primary energy resources used as raw material	MJ	6,49E+02	6,49E+02	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	1,28E+03	2,52E+02	0*	1,41E+01	9,74E+02	4,31E+01
Non hazardous waste disposed	kg	4,95E+02	4,31E+02	2,32E-01	6,23E-02	6,41E+01	1,79E-01
Radioactive waste disposed	kg	7,21E-01	5,50E-02	1,66E-04	9,51E-05	6,65E-01	2,85E-04
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	5,54E+01	5,92E+00	0*	1,39E+01	0*	3,56E+01
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	5,52E-01	2,72E-02	0*	0*	0*	5,25E-01
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.

Registration N°	SCHN-00119-V01.01-EN	Drafting rules	PCR-ed3-EN-2015 04 02			
Verifier accreditation N°	VH08					
Date of issue	05/2017	Information and reference	www.pep-ecopassport.org			
		Validity period	5 years			
Independent varification of the declaration and data in compliance with ISO 1102E ; 2010						

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

Internal External X

The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)

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

**CATHERINE COLIN** 

 $catherine.colin\,@fr.schneider-electric.com$ 

35, rue Joseph Monier

CS 30323

F- 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439 Capital social 896 313 776 €

www.schneider-electric.com

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