

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):

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

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

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>

Additional environmental information

The ELECTRIC VEHICLE CHARGING STATION presents the following relevant environmental aspects

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 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	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. 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: 92% (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 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).				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">Manufacturing</td> <td style="width: 25%; text-align: center;">Installation</td> <td style="width: 25%; text-align: center;">Use</td> <td style="width: 25%; text-align: center;">End of life</td> </tr> </table>	Manufacturing	Installation	Use	End of life
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
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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 ₂ 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 ₄ ³⁻ 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 ₂ 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 ₂ H 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	m ³	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	m ³	8,09E+04	3,05E+04	2,78E+02	1,42E+02	4,96E+04	4,14E+02
Contribution to water pollution	m ³	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*

* 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	Information and reference	www.pep-ecopassport.org
Date of issue	05/2017	Validity period	5 years
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 »			



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RCS Nanterre 954 503 439
 Capital social 896 313 776 €

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Published by Schneider Electric

SCHN-00119-V01.01-EN

05/2017

