

Product Environmental Profile

MP-V, 9 points, 4 UI, 3 DO Triac, 2 AO

MP-V-9A, MP-V-7A





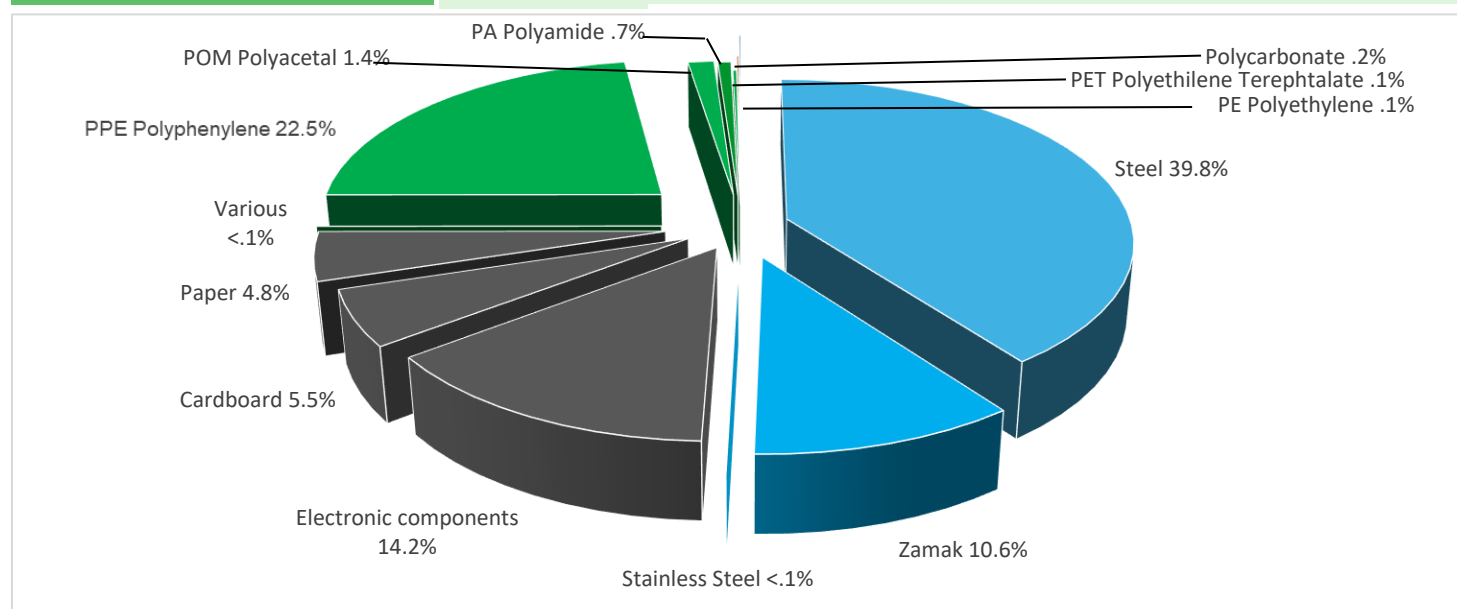
General information

Representative product	MP-V, 9 points, 4 UI, 3 DO Triac, 2 AO - SXWMPV9AX10001
Description of the product	MP-V is a multi-purpose, fully programmable, IP based field controller dedicated for VAV cooling and heating applications. MP-V integrates a controller, a damper actuator, and an air flow sensor in a single compact package for ease of installation. As the parent server. MP-V comes in two models with different I/O count.
Description of the range	MP-V-9A, MP-V-7A 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	SmartX Controller – MP-V is a multi-purpose, fully programmable, IP based field controller dedicated for VAV cooling and heating applications during 10 years. MP-V is a native SmartX device, which can either be used as a standalone BACnet/IP field controller or as part of an EcoStruxure BMS with an EcoStruxure BMS server.



Constituent materials

Reference product mass 1258.86 g including the product, its packaging and additional elements and accessories



Plastics	25.0%
Metals	50.4%
Others	24.5%



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

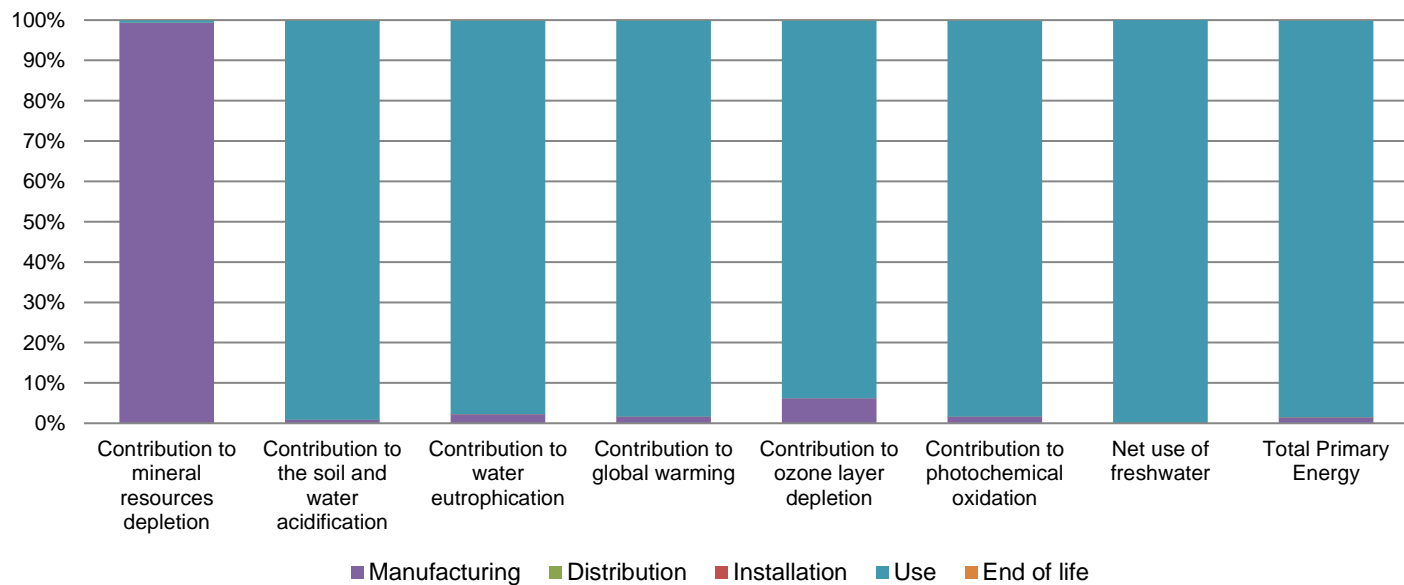
The MP-V, 9 points, 4 UI, 3 DO Triac, 2 AO presents the following relevant environmental aspects

Design	This product no longer contains a battery and the terminal blocks no longer contain red phosphorous.
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 128.9 g, consisting of cardboard (75%), paper (20%), plastic (5%) Packaging recycled materials is 60% of total packaging mass. Product distribution optimised by setting up local distribution centres
Installation	Ref. SXWMPV9AX10001 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 electronic cards (151g) 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: 79% 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	Other equipments - Active product			
Installation elements	The transport of packaging for disposal, and the disposal are accounted for in the installation phase.			
Use scenario	PSR0005, sec. 3.13 Other Equipment, Active Products Category 2 - 100% active mode, 22W over 10 years			
Geographical representativeness	Europe, US, China, France			
Technological representativeness	MP-V is a multi-purpose, fully programmable, IP based field controller dedicated for VAV cooling and heating applications. MP-V integrates a controller, a damper actuator, and an air flow sensor in a single compact package for ease of installation. As the parent server. MP-V comes in two models with different I/O count.			
Energy model used	Manufacturing	Installation	Use	End of life
	Energy model used: France	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		MP-V, 9 points, 4 UI, 3 DO Triac, 2 AO - SXWMPV9AX10001					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	9.13E-03	9.06E-03	0*	0*	6.14E-05	0*
Contribution to the soil and water acidification	kg SO ₂ eq	3.17E+00	2.75E-02	7.42E-04	0*	3.14E+00	4.06E-04
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	2.74E-01	6.06E-03	1.71E-04	0*	2.67E-01	1.45E-04
Contribution to global warming	kg CO ₂ eq	1.08E+03	1.74E+01	1.62E-01	0*	1.06E+03	3.66E-01
Contribution to ozone layer depletion	kg CFC11 eq	5.37E-05	3.32E-06	0*	0*	5.03E-05	1.48E-08
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	2.17E-01	3.56E-03	5.29E-05	0*	2.13E-01	3.91E-05
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	2.40E+03	2.90E-01	0*	0*	2.40E+03	0*
Total Primary Energy	MJ	1.89E+04	2.84E+02	2.30E+00	0*	1.86E+04	1.90E+00



Optional indicators		MP-V, 9 points, 4 UI, 3 DO Triac, 2 AO - SXWMPV9AX10001					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.41E+04	2.29E+02	2.28E+00	0*	1.38E+04	1.75E+00
Contribution to air pollution	m ³	6.52E+04	2.77E+03	6.91E+00	0*	6.24E+04	1.35E+01
Contribution to water pollution	m ³	4.84E+04	1.35E+03	2.67E+01	0*	4.70E+04	2.10E+01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.78E-01	1.78E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	2.01E+03	6.78E+00	0*	0*	2.00E+03	0*
Total use of non-renewable primary energy resources	MJ	1.69E+04	2.77E+02	2.29E+00	0*	1.66E+04	1.90E+00
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.01E+03	5.67E+00	0*	0*	2.00E+03	0*
Use of renewable primary energy resources used as raw material	MJ	1.12E+00	1.12E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.69E+04	2.64E+02	2.29E+00	0*	1.66E+04	1.90E+00
Use of non renewable primary energy resources used as raw material	MJ	1.33E+01	1.33E+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	5.10E+01	3.85E+01	0*	0*	1.10E+01	1.55E+00
Non hazardous waste disposed	kg	2.53E+03	4.39E+00	0*	0*	2.53E+03	0*
Radioactive waste disposed	kg	1.65E+00	2.67E-03	0*	0*	1.65E+00	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	1.16E+00	1.45E-01	0*	1.28E-01	0*	8.91E-01
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	8.09E-02	5.26E-04	0*	0*	0*	8.04E-02
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 v5.7.0.2, 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.

MP-V-7A and MP-V-9A have the same size and mass, sharing over 99% of components. The only significant impact difference is energy usage. The use phase has the greatest impact on the majority of environmental indicators. The impacts from other product(s) in the range can be calculated based on the following rules...

Manufacturing - same impact for both products

Distribution - same for impact both products

Installation - same for impact both products

Use - MP-V-7A, the other product in the range, has use phase impacts that are approximately 5% lower due to lower energy use.

End of Life - same impact for both products

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 :	SCHN-00312-V01.01-EN	Drafting rules	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH25	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Date of issue	05/2018	Information and reference documents	www.pep-ecopassport.org
		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)			
PEP are compliant with XP C08-100-1 :2014			
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

Country Customer Care Center
<http://www.schneider-electric.com/contact>

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

Published by Schneider Electric

SCHN-00312-V01.01-EN

© 2017 - Schneider Electric – All rights reserved

05/2018