

# Product Environmental Profile

**ALTIVAR 610 - 110 to 160kW 400V - 3PH - IP20**

**Easy Altivar 610**





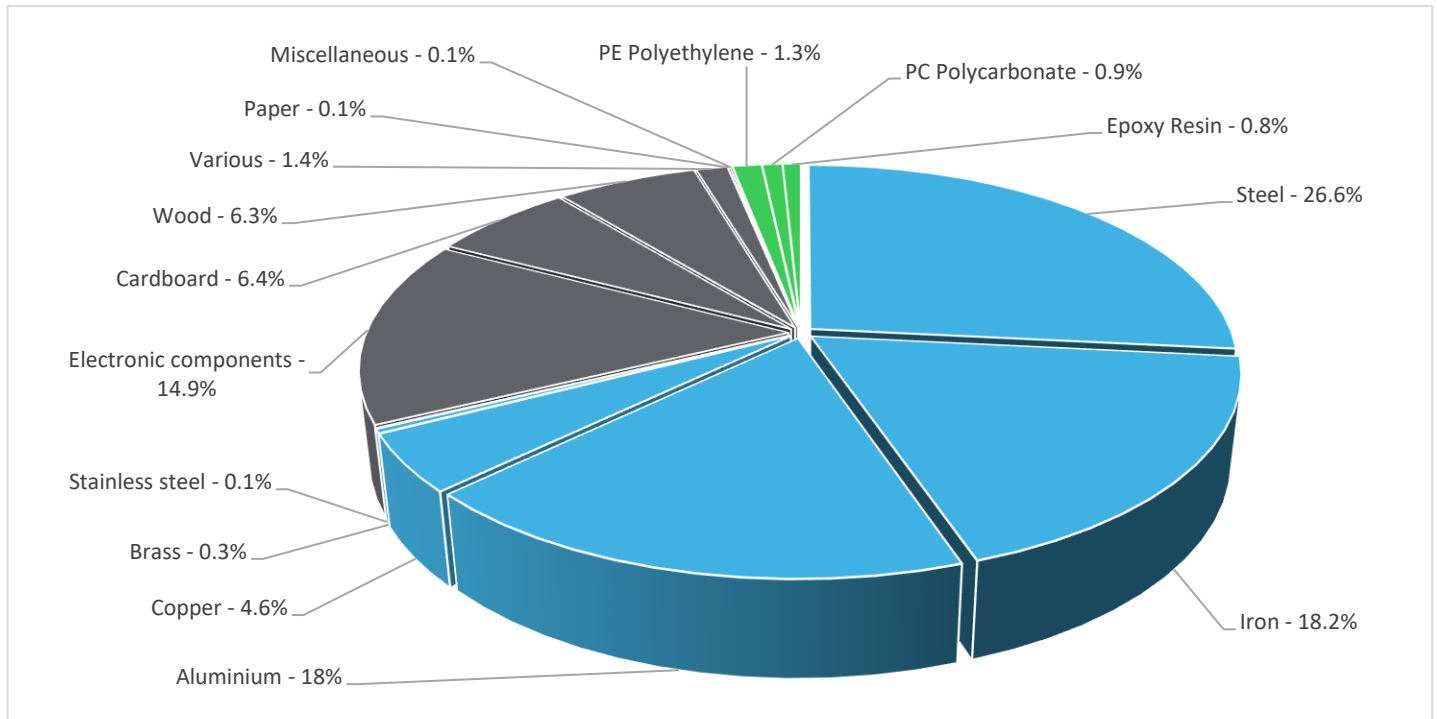
## General information

<b>Representative product</b>	ALTIVAR 610 - 110 to 160kW 400V - 3PH - IP20 - ATV610C16N4
<b>Description of the product</b>	The main purpose of the Easy Altivar 610 is the speed control and variation of an asynchronous electric motor for water treatment applications.
<b>Description of the range</b>	Altivar Process ATV610 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.
<b>Functional unit</b>	During the 10 years, the variable speed drive can control the speed and torque of asynchronous electric motor for water treatment applications. The function unit is accordance with the following technical data: -Rated supply voltage:400 V. -Motor Power KW: from 90KW to 132KW for heavy duty & from 110KW to 160KW for normal duty. -Motor Power HP: from 122HP to 180HP for heavy duty & from 150HP to 218HP for normal duty. -IP20 in accordance with the standard IEC 60529.



## Constituent materials

**Reference product mass** 95.7kg including the product, its packaging and additional elements and accessories



Plastics	3.0%
Metals	67.8%
Others	29.2%



## 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

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 ALTIVAR 610 - 110 to 160kW 400V - 3PH - IP20 presents the following relevant environmental aspects

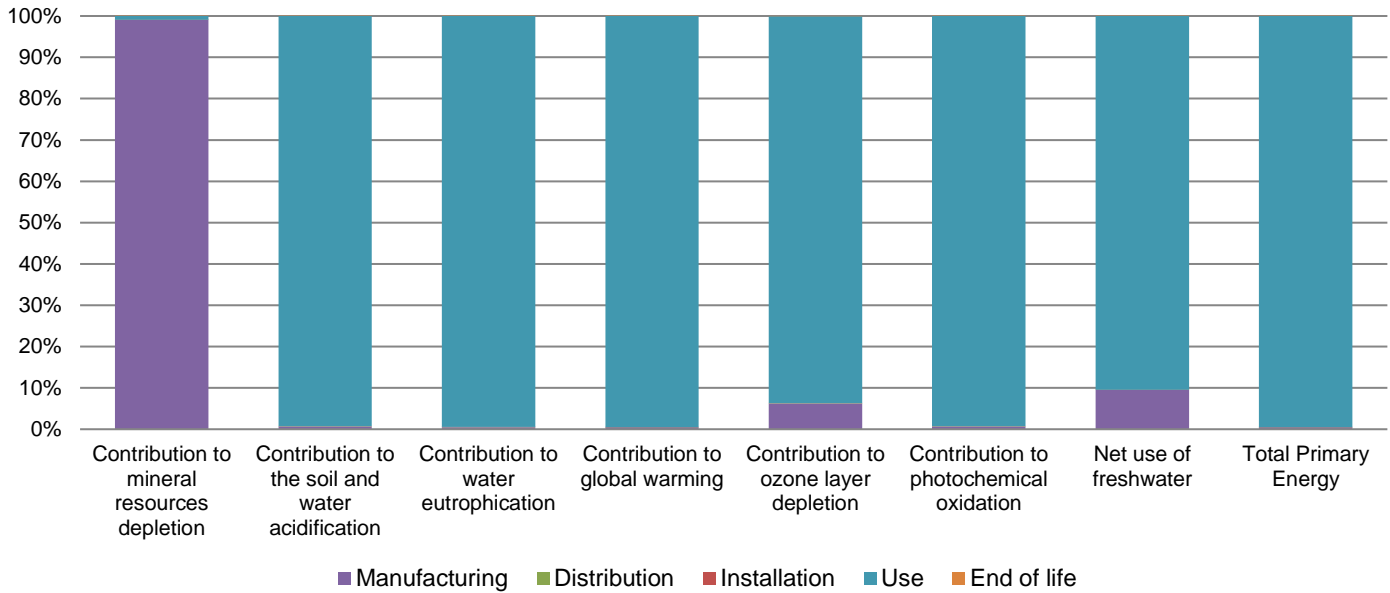
<b>Design</b>	Indicate all the eco-design improvements brought to the product at the design phase compared to previous offer range, refer to ecoDesign Way results
<b>Manufacturing</b>	Manufactured at a Schneider Electric production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 13707 g, consisting of Wood(44.5%),Cardboard (45.5%),Paper(0.6%),PE(9.3%),PP(0.1%) Product distribution optimised by setting up local distribution centres
<b>Installation</b>	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted for during the installation phase.
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains Electronic Board (Communication) (2827.8 g) Electronic Board (Power) (7805.3g) Electrolyte Capacitors (4904.0 g) Cable (High current) (175.5 g) LCD display(6.7g) 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 <a href="https://www.se.com/ww/en/work/support/green-premium/">https://www.se.com/ww/en/work/support/green-premium/</a> Recyclability potential: <b>78%</b> 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

<b>Reference life time</b>	10 years			
<b>Product category</b>	Other equipments - Active product			
<b>Installation elements</b>	No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging accounted for during installation.			
<b>Use scenario</b>	The product is in active mode 80% of the time a power use of 3710 W and in stand-by mode 20% of the time with a power use of 60.2 W, for 10 years.			
<b>Geographical representativeness</b>	China			
<b>Technological representativeness</b>	The main purpose of the Easy Altivar 610 is the speed control and variation of an asynchronous electric motor for water treatment applications.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: China	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN	Electricity mix; AC; consumption mix, at consumer; 220V; CN

Compulsory indicators		ALTIVAR 610 - 110 to 160kW 400V - 3PH - IP20 - ATV610C16N4					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	1.33E-01	1.32E-01	0*	0*	1.17E-03	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	2.90E+02	1.94E+00	5.64E-02	0*	2.88E+02	3.01E-02
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	7.64E+01	4.04E-01	1.30E-02	0*	7.60E+01	1.00E-02
Contribution to global warming	kg CO <sub>2</sub> eq	2.67E+05	1.26E+03	0*	0*	2.65E+05	0*
Contribution to ozone layer depletion	kg CFC11 eq	2.26E-03	1.41E-04	0*	0*	2.11E-03	1.21E-06
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	3.43E+01	2.33E-01	4.02E-03	0*	3.40E+01	0*
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m <sup>3</sup>	3.28E+02	3.14E+01	0*	0*	2.96E+02	0*
Total Primary Energy	MJ	4.37E+06	2.08E+04	0*	0*	4.35E+06	0*



Optional indicators		ALTIVAR 610 - 110 to 160kW 400V - 3PH - IP20 - ATV610C16N4						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Contribution to fossil resources depletion	MJ	4.03E+06	1.39E+04	0*	0*	4.01E+06	0*	
Contribution to air pollution	m <sup>3</sup>	2.77E+07	1.65E+05	0*	0*	2.75E+07	0*	
Contribution to water pollution	m <sup>3</sup>	1.33E+07	9.94E+04	2.03E+03	0*	1.32E+07	1.67E+03	
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Use of secondary material	kg	2.00E+01	2.00E+01	0*	0*	0*	0*	
Total use of renewable primary energy resources	MJ	2.24E+05	7.27E+02	0*	0*	2.23E+05	0*	
Total use of non-renewable primary energy resources	MJ	4.14E+06	2.01E+04	0*	0*	4.12E+06	0*	
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.23E+05	4.73E+02	0*	0*	2.23E+05	0*	
Use of renewable primary energy resources used as raw material	MJ	2.53E+02	2.53E+02	0*	0*	0*	0*	
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.14E+06	1.98E+04	0*	0*	4.12E+06	0*	
Use of non renewable primary energy resources used as raw material	MJ	2.68E+02	2.68E+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	1.07E+04	2.01E+03	0*	0*	8.56E+03	1.18E+02	
Non hazardous waste disposed	kg	4.87E+04	5.14E+02	0*	5.95E+00	4.82E+04	0*	
Radioactive waste disposed	kg	1.76E+00	1.70E-01	3.12E-04	2.14E-04	1.59E+00	8.19E-04	
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Materials for recycling	kg	7.94E+01	6.45E+00	0*	8.40E+00	0*	6.45E+01	
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	
Materials for energy recovery	kg	4.68E+00	0*	0*	0*	0*	4.68E+00	
Exported Energy	MJ	9.52E+00	5.71E+00	0*	3.81E+00	0*	0*	

\* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME V5.9.3, database version 44166 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.

According to this environmental analysis, all the impacts (excepted "Mineral resources depletion") of other products in this family may be proportionally extrapolated by energy consumption values.

For "Mineral resources depletion", the impacts may be proportionally extrapolated by the products weights.

*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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Date of issue	04/2022	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
<i>Independent verification of the declaration and data</i>			
Internal	X	External	
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »</i>			

Schneider Electric Industries SAS  
Country Customer Care Center  
<http://www.se.com/contact>  
35, rue Joseph Monier  
CS 30323  
FR- 92500 Rueil Malmaison Cedex  
RCS Nanterre 954 503 439  
Capital social 896 313 776 €

[www.schneider-electric.com](http://www.schneider-electric.com)

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