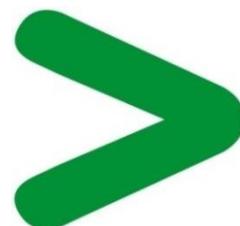


Product Environmental Profile

EPC3004 (Temperature / Process Controller)

Temperature / Process Controllers



Life Is 

Eurotherm[®]

by **Schneider** Electric



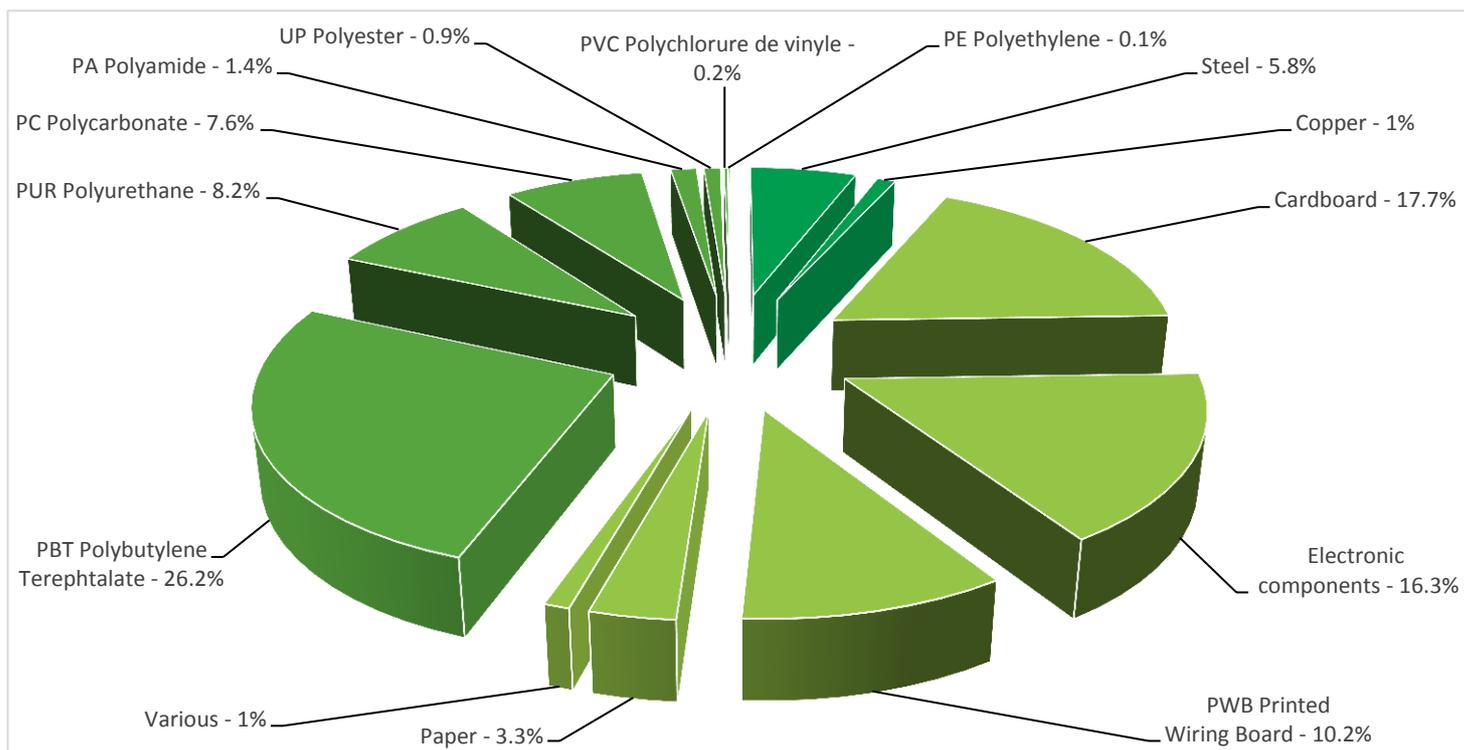
General information

Representative product	EPC3004 (Temperature / Process Controller) -EPC3000 Series
Description of the product	A highly versatile and configurable controller able to take a wide range of input types such as TC, RTD, mV, mA, CT and Voltage. Utilizing PID control, together with timers, maths and logic functions, plus graphical user wiring features provide accurate control of relay, logic (SSR drive), DC and TRIAC outputs.
Description of the range	Temperature / Process Controllers 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	Provision of precision temperature measurement and / or control, for a period of 10 years, within industrial applications, for a single process loop, interacting with up to fifteen inputs, twelve outputs as well as communications via serial or Ethernet. Configuration is achieved with graphical user wiring within software.



Constituent materials

Reference product mass 660.7 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 EPC3004 (Temperature / Process Controller) presents the following relevant environmental aspects

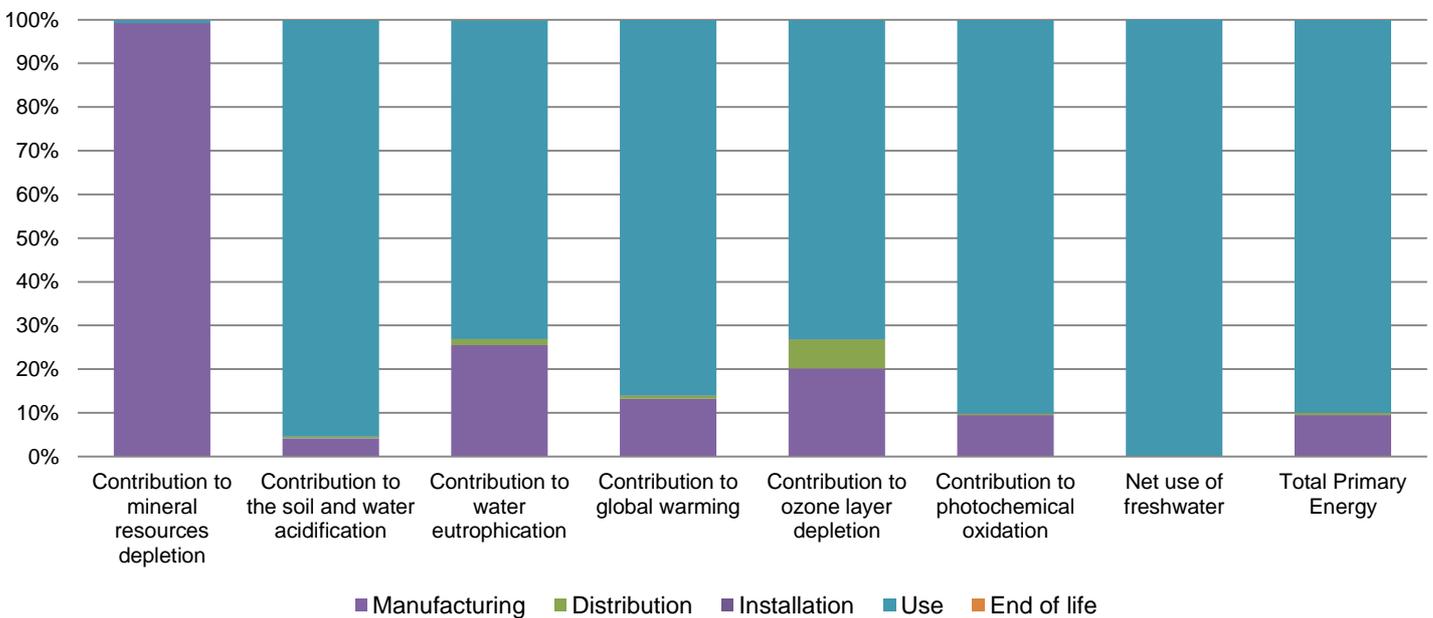
Design	Very long product life and highly serviceable. Optimum control of customer process reduces energy use.
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 192.7 g, consisting of Cardboard (60.4%), PU foam (28.0%), Paper (11.4%), PE film (0.2%) Packaging recycled materials is 43.5% of total packaging mass.
Installation	The EPC3004 controller does not require any special installation materials or operations.
Use	The product does not require special maintenance operations.
End of life	<p>End of life optimized to decrease the amount of waste and allow recovery of the product components and materials</p> <p>This product contains Electronic boards (119g), plastic parts with brominated FR (172g) that should be separated from the stream of waste so as to optimize end-of-life treatment.</p> <p>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://www.eurotherm.co.uk/downloads/certificates/green-premium/EPC3000 Series</p> <p>Recyclability potential: 12% 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).</p>

Environmental impacts

Reference life time	10 years			
Product category	Active products			
Installation elements	No significant amount of material or energy needed to install the product. Only transport and disposal of packaging materials accounted for during installation.			
Use scenario	<p>Consumed power is 9 W 100 % of the time in Active mode, 0 W 0 % of the time in Standby mode, 0 W 0 % of the time in Sleep mode and 0 W 0 % of the time in Off mode.</p> <p>The product is in active mode 100% of the time with a power use of 9W for 10 years.</p>			
Geographical representativeness	Product is used mainly in Europe, and to a lesser extent in Asia, Africa, North America, South America and Australia.			
Technological representativeness	A highly versatile and configurable controller able to take a wide range of input types such as TC, RTD, mV, mA, CT and Voltage. Utilizing PID control, together with timers, maths and logic functions, plus graphical user wiring features provide accurate control of relay, logic (SSR drive), DC and TRIAC outputs.			
Energy model used	Manufacturing	Installation	Use	End of life
	Energy model used: United Kingdom	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		EPC3004 (Temperature / Process Controller) - EPC3000 Series					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	4.51E-03	4.48E-03	0*	0*	3.36E-05	0*
Contribution to the soil and water acidification	kg SO ₂ eq	1.69E+00	7.07E-02	6.66E-03	0*	1.61E+00	1.96E-04
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	1.33E-01	3.40E-02	1.80E-03	1.51E-05	9.73E-02	8.53E-05
Contribution to global warming	kg CO ₂ eq	4.49E+02	5.94E+01	3.20E+00	0*	3.86E+02	2.48E-01
Contribution to ozone layer depletion	kg CFC11 eq	3.44E-05	6.93E-06	2.29E-06	0*	2.52E-05	8.75E-09
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	9.83E-02	9.35E-03	3.48E-04	0*	8.85E-02	1.74E-05

Resources use		EPC3004 (Temperature / Process Controller) - EPC3000 Series					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	1.40E+03	8.40E-01	0*	0*	1.40E+03	0*
Total Primary Energy	MJ	8.57E+03	8.15E+02	4.00E+01	0*	7.71E+03	8.64E-01



Optional indicators		EPC3004 (Temperature / Process Controller) - EPC3000 Series						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Contribution to fossil resources depletion	MJ	5.30E+03	8.69E+02	4.09E+01	0*	4.38E+03	8.03E-01	
Contribution to air pollution	m ³	2.23E+04	5.50E+03	1.38E+02	0*	1.66E+04	6.30E+00	
Contribution to water pollution	m ³	2.07E+04	4.31E+03	4.78E+02	2.33E+00	1.59E+04	1.17E+01	
Resources use		Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.34E-01	1.34E-01	0*	0*	0*	0*	
Total use of renewable primary energy resources	MJ	1.00E+03	2.03E+01	0*	0*	9.81E+02	0*	
Total use of non-renewable primary energy resources	MJ	7.57E+03	7.95E+02	4.00E+01	0*	6.73E+03	8.63E-01	
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	1.00E+03	1.99E+01	0*	0*	9.81E+02	0*	
Use of renewable primary energy resources used as raw material	MJ	3.87E-01	3.87E-01	0*	0*	0*	0*	
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	7.56E+03	7.84E+02	4.00E+01	0*	6.73E+03	8.63E-01	
Use of non renewable primary energy resources used as raw material	MJ	1.06E+01	1.06E+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	5.12E+01	4.98E+01	0*	2.49E-01	2.01E-01	9.94E-01
Non hazardous waste disposed	kg	1.45E+03	1.24E+01	0*	0*	1.44E+03	0*
Radioactive waste disposed	kg	9.67E-01	4.83E-03	6.55E-04	0*	9.62E-01	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	2.22E-01	2.60E-02	0*	1.38E-01	0*	5.80E-02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	6.83E-02	2.13E-03	0*	2.72E-03	0*	6.34E-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 EIMEv5.6.0.1 , database version 2016-11.

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.

The environmental indicators of other products in this family may be proportional extrapolated based on relationships between an amount of a key parameter of the product as compared to the amount of that key parameter within the reference product. Proportionality rules are based on the following key parameters: Manufacturing phase impacts - mass of the electronic boards (with components). Distribution phase impacts - total mass of product (including packaging). Installation phase impacts - mass of packaging. Use phase impacts - product wattage. End of Life impacts - the product mass (excluding packaging).

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°	ENVPEP1702003_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	03/2017		
Validity period	5 years	Information and reference documents	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 »			

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