

# Product Environmental Profile

## 6180A (Paperless Graphic Recorder)



Life Is  On

**Eurotherm.**  
by **Schneider** Electric



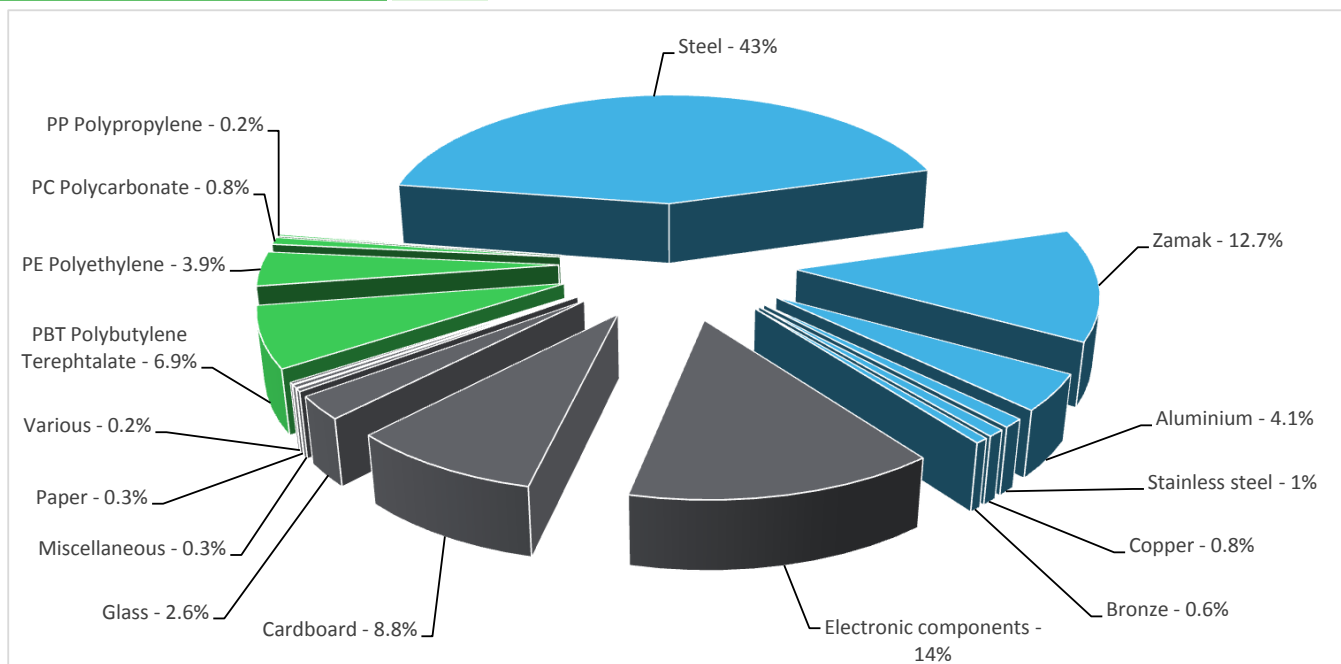
## General information

<b>Representative product</b>	6180A (Paperless Graphic Recorder) - 6180A
<b>Description of the product</b>	A high accuracy and configurable graphical recorder with 12.1" XGA touchscreen display to enable operators to clearly view process data in varying formats. Data is stored in a tamper-resistant binary format that can be used for secure long term records.
<b>Functional unit</b>	Display and secure recording of up to 48 input channels with a sample rate of 125ms, for a period of 10 years within industrial applications. Configurable software controls up to 27 relays outputs, 12 groups, timers and 4 alarms per channel. Unique user names with configurable access permissions and passwords provide security of data.



## Constituent materials

<b>Reference product mass</b>	11498 g including the product, its packaging and additional elements and accessories
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Plastics	11,8%
Metals	62,2%
Others	26,2%



## 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

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 6180A (Paperless Graphic Recorder) presents the following relevant environmental aspects

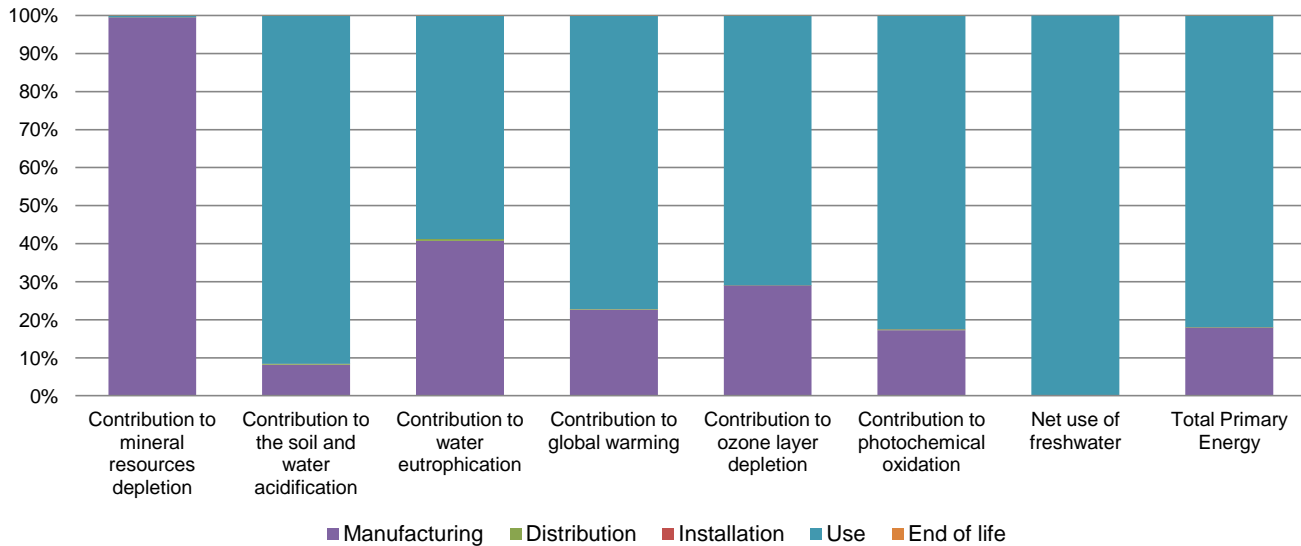
<b>Design</b>	High levels of serviceability with a long product life. Allows optimisation of the end application through the display and control of input data.
<b>Manufacturing</b>	Manufactured at a Schneider Electric production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 1481.4 g, consisting of cardboard / paper (69.4%), PE film (2.5%), PE foam (27%), polycarbonate (1.1%) Packaging recycled materials is 49% of total packaging mass.
<b>Installation</b>	The 6180A controller does not require any special installation materials or operations.
<b>Use</b>	1 battery of 3.2g has to be changed every 3 years
<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 boards (1112g), plastic parts with brominated FR (830g), LCD (500g), Battery 3.2g 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="http://www.eurotherm.co.uk/downloads/certificates/green-premium/6180A">http://www.eurotherm.co.uk/downloads/certificates/green-premium/6180A</a>  Recyclability potential: <b>68%</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 significant amount of material or energy needed to install the product. Only transport and disposal of packaging materials accounted for during installation.			
<b>Use scenario</b>	The product is in active mode 100% of the time with a power use of 60W for 10 years. There are no low power or standby modes.			
<b>Geographical representativeness</b>	Product is used mainly in Europe, and to a lesser extent in Asia, Africa, North America, South America and Australia.			
<b>Technological representativeness</b>	A high accuracy and configurable graphical recorder with 12.1" XGA touchscreen display to enable operators to clearly view process data in varying formats. Data is stored in a tamper-resistant binary format that can be used for secure long term records.			
<b>Energy model used</b>	<b>Manufacturing</b>	<b>Installation</b>	<b>Use</b>	<b>End of life</b>
	Energy model used: Poland	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

Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	4,77E-02	4,75E-02	0*	0*	2,24E-04	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	1,17E+01	9,57E-01	2,49E-02	0*	1,07E+01	3,60E-03
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	1,11E+00	4,50E-01	5,72E-03	0*	6,49E-01	1,43E-03
Contribution to global warming	kg CO <sub>2</sub> eq	3,34E+03	7,56E+02	5,54E+00	0*	2,58E+03	3,36E+00
Contribution to ozone layer depletion	kg CFC11 eq	2,37E-04	6,87E-05	0*	0*	1,68E-04	1,21E-07
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	7,16E-01	1,24E-01	1,77E-03	0*	5,90E-01	3,49E-04
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	9,35E+03	1,14E+01	0*	0*	9,34E+03	0*
Total Primary Energy	MJ	6,27E+04	1,12E+04	7,83E+01	0*	5,14E+04	1,67E+01



Optional indicators	6180A (Paperless Graphic Recorder) - 6180A						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4,05E+04	1,11E+04	7,78E+01	0*	2,92E+04	1,54E+01
Contribution to air pollution	m <sup>3</sup>	1,93E+05	8,16E+04	2,27E+02	0*	1,11E+05	1,21E+02
Contribution to water pollution	m <sup>3</sup>	1,53E+05	4,61E+04	9,11E+02	0*	1,06E+05	2,08E+02
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2,90E+00	2,90E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	6,77E+03	2,27E+02	0*	0*	6,54E+03	0*
Total use of non-renewable primary energy resources	MJ	5,60E+04	1,10E+04	7,82E+01	0*	4,49E+04	1,67E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6,76E+03	2,22E+02	0*	0*	6,54E+03	0*
Use of renewable primary energy resources used as raw material	MJ	4,63E+00	4,63E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5,59E+04	1,09E+04	7,82E+01	0*	4,49E+04	1,67E+01
Use of non renewable primary energy resources used as raw material	MJ	6,09E+01	6,09E+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	7,00E+02	6,83E+02	0*	3,32E-01	1,34E+00	1,49E+01
Non hazardous waste disposed	kg	9,83E+03	2,27E+02	0*	0*	9,60E+03	0*
Radioactive waste disposed	kg	6,47E+00	5,70E-02	0*	0*	6,41E+00	0*

Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	9,14E+00	1,13E+00	0*	1,15E+00	0*	6,86E+00
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	5,60E-01	1,25E-02	0*	7,94E-04	0*	5,47E-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 v5.6.0.1, 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).

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	ENVPEP1707009_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	09/2017		
Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Independent verification of the declaration and data			
Internal	X	External	
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »			

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Published by Schneider Electric

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