

Product Environmental Profile

Power socket and TV point Magic series



BTICINO'S ENVIRONMENTAL COMMITMENTS

Home automation, high range civil installation and canalisation systems are types of products in which BTicino excels on the Italian market. BTicino, as a responsible producer, adopts an environmental policy declined according to three axes:

• **Incorporate environmental management into our industrial sites**

BTicino is concerned with the protection and preservation of the environment from the manufacture of its products.

For this reason, all sites are ISO 14001 certified or committed to implementation of an environmental responsible management policy.

• **Involve the environment in product design**


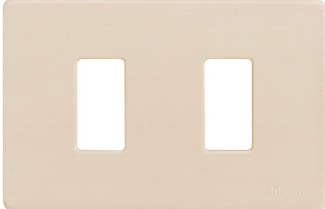


A product generates environmental impacts throughout its whole life cycle. For this reason, BTicino is committed to minimize the environmental impact of its products and provides its customers all relevant information (composition, consumption, end of life ...).

• **Offer our customers environmentally friendly solutions**

BTicino offers to its customers solutions to reduce the energy and environmental impact of commercial, residential and industrial buildings: solutions that allow to consume less energy in according to the real needs.



REFERENCE PRODUCT

Function	The product allows the power supply of equipment with plugs of 19 and 26 mm wheelbase and allows the connection of a cable for a monouser installations antenna, remotely supplied and centralized systems, monouser and centralized satellite with passage of current and signal for the selection of channels. Product category: passive. Life span considered for the study: 20 years.	
Reference Products		
	BT-503R 3 modules support	BT-503/2/R 3 modules 2P cover plate - resin
		
	BT-5180 Power socket 2P + E - 16 A - 250 V a.c.	BT-5173D Shunted coaxial TV jack

The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be held binding on the Company.



CONCERNED PRODUCTS

The environmental data for the Reference Product represent the following Catalogue Numbers:

• BT-503R	• BT-503/2/R	• BT-5180	• BT-5173D
		<ul style="list-style-type: none"> • BT-5180R • BT-5113 • BT-5129 	<ul style="list-style-type: none"> • BT-5173DC

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■ CONSTITUENT MATERIALS

This product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. At the date of publication of this document, this product contains no substances to which the RoHS directives apply (2002/95/EC and review 2011/65/EC) and no substances appearing on the list of candidates for authorisation of the European REACH regulation.

Total weight of Reference Products:		142 g (unit packaging included)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
Polycarbonates	21,0 %	Zamak	28,2 %	Other	0,2 %
ABS	16,9 %	Steel	8,6 %	Packaging as % of weight	
Polyoxymethylene (POM)	0,7 %	Copper	3,3 %	Cardboard	16,7 %
Polyamide (PA66)	0,5 %	Zinc	1,5 %	Polyethylene (LDPE)	0,8 %
Phenolic resin	0,4 %	Stainless steel	0,3 %	Paper	0,7 %
Other plastics	0,2 %				
Total plastics	39,7 %	Total metals	41,9 %	Total other and packaging	18,4 %

Estimated recycled material content: 20 % by weight



■ MANUFACTURE

This product comes from sites that have received ISO14001 certification.



■ DISTRIBUTION

The Group's products are distributed from logistics centres located to optimize transport efficiency.

The Reference Product is therefore transported over an average distance of 780 km, essentially by road, representing a marketing in Europe.

Packaging is compliant with Directive 2004/12/EC concerning packaging and packaging waste. At the end of product life, the theoretical recycling potential is 99 % and their energy recovery potential is 99 % (as % of packaging weight).



■ INSTALLATION

Installation components not delivered with the product are not taken into account.



■ USE

Service and maintenance:

Under normal conditions of use, this type of product requires no servicing or maintenance.

Consumable

No consumables are necessary to use the products.

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END OF LIFE

• **Non-hazardous waste contained in the product:** 116 g

• **Hazardous waste contained in the product:**

This product contains no hazardous waste.

• **Theoretical recycling potential:**

The theoretical recycling potential of a product is the percentage of material that can be recycled using existing techniques. It takes no account of the existence or lack of recycling services, which are highly dependent on the local situation.

This product contains 99 % by weight of potentially recyclable materials (excluding packaging):

- Plastic materials : 48 %
- Metal materials : 51 %

• **Energy recovery potential:**

Energy recovery consists in using the calories contained in waste by burning it and recovering the energy produced, for example, to heat buildings or to produce electricity. The process uses the convertible energy contained in the waste.
48 % of the product mass can be recycled with energy recovery.



ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end of life of the product marketed and used in Europe. The following modelling elements were taken into account:

Manufacture	As required by the «PEP ecopassport» programme all transports for the manufacturing of the Reference Product, including materials and components, has been taken in account.
Distribution	Transport between the last Group distribution centre and an average delivery to the sales area.
Installation	Installation components not delivered with the product are not taken into account.
Use	<ul style="list-style-type: none"> • Maintenance: under normal conditions of use, this type of product requires no servicing or maintenance. • No consumables are necessary to use the product. • Product category: passive product. • Use scenario: 20-years working life. Active mode at 30 % of the nominal current (16 A) for 30 % of the time. This modelling duration does not constitute a minimum durability requirement. • Energy model: Electricity Europe 2005.
End of life	In view of the data available on the date of creation of the document, and in accordance with the requirements of the PCR of the « PEP ecopassport » programme, was counted transport of the Reference Product by road only once, over a distance of 1000 km, to a processing site at end of life.
Software used	EIME V5 and its database «Legrand-2012-10-31 version 3» developed from database «CODDE-2012-07».

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ENVIRONMENTAL IMPACTS

		Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Mandatory indicators	Contribution to greenhouse effect	2.30E+00	kg-CO ₂ eq.	1.20E+00	52%	1.41E-02	<1%	0.00E+00	0%	1.07E+00	46%	1.08E-02	<1%
	Damage to the ozone layer	2.26E-07	kg-CFC-11 eq.	1.50E-07	67%	9.99E-09	4%	0.00E+00	0%	5.79E-08	26%	7.68E-09	3%
	Eutrophisation of water	1.39E-03	kg-PO ₄ ³⁻ eq.	1.39E-03	100%	2.35E-07	<1%	0.00E+00	0%	2.51E-06	<1%	1.81E-07	<1%
	Photochemical ozone formation	8.45E-04	kg-C ₂ H ₄ eq.	4.50E-04	53%	1.22E-05	2%	0.00E+00	0%	3.73E-04	44%	9.42E-06	1%
	Acidification of the air	3.74E-04	kg-H ⁺ eq.	2.28E-04	61%	1.86E-06	<1%	0.00E+00	0%	1.43E-04	38%	1.43E-06	<1%
	Total energy consumed	4.05E+01	MJ	1.91E+01	47%	1.78E-01	<1%	0.00E+00	0%	2.11E+01	52%	1.37E-01	<1%
	Consumption of water	8.57E+00	dm ³	5.48E+00	64%	1.69E-02	<1%	0.00E+00	0%	3.05E+00	36%	1.30E-02	<1%

Optional indicators	Depletion of natural resources	1.85E-15	years ⁻¹	1.82E-15	99%	2.43E-19	<1%	0.00E+00	0%	2.40E-17	1%	1.87E-19	<1%
	Toxicity of the air	5.33E+05	m ³	3.51E+05	66%	2.76E+03	<1%	0.00E+00	0%	1.77E+05	33%	2.12E+03	<1%
	Toxicity of the water	1.55E+00	m ³	1.24E+00	80%	1.97E-03	<1%	0.00E+00	0%	3.06E-01	20%	1.51E-03	<1%
	Production of hazardous waste	8.63E-02	kg	6.86E-02	79%	5.25E-06	<1%	0.00E+00	0%	1.77E-02	21%	4.04E-06	<1%

The environmental impacts of the Reference Product are representative of the products covered by the PEP, which therefore constitute a homogeneous environmental family.

Extrapolation rule for the products of the homogeneous family different from those of reference: the environmental impacts of the Reference Product, for all phases of the life cycle, are representative of those of any other power socket and TV point made with homogeneous family articles except for power socket and TV point made with the article BT-5113. In this case the environmental impacts of the Production, Distribution, Installation and End of Life phases are the same as those of the Reference Product, while the environmental impacts of the use phase are obtained by multiplying those of the Reference Product by the coefficient 0.44.

The values of these impacts are valid for the context specified in this document. They must not be used directly to draw up the environmental balance sheet for the installation.

Registration number: LGRP-2013-091-v1-en	Drafting rule: PEP-PCR-ed2.1-FR-2012 12 11
Authorisation number of checker: VH02	Programme information: www.pep-ecopassport.org
Date of issue: June 2013	Validity period: 4 years
Independent verification of the declaration and data, in accordance with ISO 14025:2006 Interne <input checked="" type="checkbox"/> Externe <input type="checkbox"/>	
In accordance with ISO 14025 :2006 Type III environmental declaration	
The critical review of the PCR was conducted by a panel of experts chaired by J.Chevalier (CSTB)	
The elements of the present PEP cannot be compared with elements from another programme	

