

Product Environmental Profile

Power socket and TV socket outlet Matix series

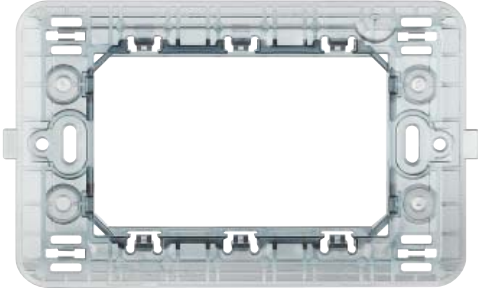






BTICINO'S ENVIRONMENTAL COMMITMENTS

- Incorporate environmental management into our industrial sites**
 Of all Legrand sites worldwide, over 85% are ISO 14001-certified (sites belonging to the Group for more than five years).
- Offer our customers environmentally friendly solutions**
 Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.
- Involve the environment in product design and provide informations in compliance with ISO 14025**
 Reduce the environmental impact of products over their whole life cycle.
 Provide our customers with all relevant information (composition, consumption, end of life, etc.).



REFERENCE PRODUCT

Function	Connect/disconnect during 20 years the shunted coaxial TV plug 9,5 mm male connector and the electric plug that is associated with a load consuming 16 A maximum under a voltage of 250 V, while protecting the user from direct contact with live parts.		
Reference Product			
	BT-503SA 3 modules support - screws equipped		BT-AM4803BBN 3 moduled cover plate - white
			
	BT-AM5180 2P + E 10/16 A 250 V a.c.socket - Italian standard	BT-AM5000 1 module blank plate	BT-AM5173D Shunted coaxial TV socket

Tutte le informazioni menzionate nel presente documento (caratteristiche e dati) sono suscettibili di modifiche e non possono dunque costituire un impegno da parte nostra.



PRODUCTS CONCERNED

The environmental data is representative of the following products:

BT-503SA	BT-AM4803BBN	BT-AM5180	BT-AM5000	BT-AM5173D
	BT-AM4803BAV - BCN - BCD - MSL MGL - MTA - MIR - GOS - GCR - GOR TBC - TRC - TGG - TBM - CBN - CAV CBC - CAR - CAB - CRD - CVS - CBU	BT-A5180R BT-A5180A BT-A5180V	BT-A5000	BT-AM5173P BT-A5173P BT-A5173D

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■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/EU.

Total weight of Reference Product		149 g (all packaging included)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
Polycarbonate	19,6 %	Zamak	26,9 %	Electronic cards	1,0 %
ABS	15,6 %	Steel	5,5 %	Packaging as % of weight	
Polyoxymethylene	0,7 %	Copper alloys	4,5 %	Wood	12,6 %
Polyamide	0,4 %			Paper/Cardboard	12,0 %
Polypropylene	0,1 %			Polyethylene	1,1 %
Total plastics	36,4 %	Total metals	36,9 %	Total other and packaging	26,7 %

Estimated recycled material content: 13 % by mass.



■ MANUFACTURE

This Reference 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 with european directive 2004/12/EC concerning packaging and packaging waste. At the packaging end of life, its recycling rate is of 93 % (as % of packaging weight).



■ INSTALLATION

For the installation of the product, only standard tools are needed.



■ USE

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

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END OF LIFE

The product end-of-life factors are taken into account during the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse.

• **Recyclability rate of the Reference Product:**

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 96 %. This value is based on data collected from a technological channel operating on an industrial basis. It does not pre-validate the effective use of this channel for the end of life of this product.

Separated into:

- plastic materials (excluding packaging) : 34 %
- metal materials (excluding packaging) : 37 %
- other materials (excluding packaging) : 1 %
- packaging (all types of materials) : 24 %



ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end-of-life. It is representative from products marketed and used in Europe, in compliance with the local current standards.

For each phase, the following modelling elements were taken in account:

Manufacture	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
Distribution	Transport between the last Group distribution centre and an average delivery point in the sales area.
Installation	The end of life of the packaging.
Use	<ul style="list-style-type: none"> • Product category: Power socket: PSR 0005-ed2-2016 03 29, § 3.8 Sockets; TV socket: PSR 0005-ed2-2016 03 29, § 3.13 Other equipments • Use scenario: Power socket: non-continuous operation for 20 years at 50% of rated load, during 50% of the time; TV socket: continuous operation for 20 years at 30% of rated load, during 100% of the time. This modelling duration does not constitute a minimum durability requirement. • Energy model: Electricity Mix, Europe 27 - 2002.
End of life	The default end of life scenario maximizing the impacts.
Software and database used	EIME V5 and its database «CODDE-2015-04»

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SELECTION OF ENVIRONMENTAL IMPACTS

	Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
	Value	Unit	Value	%	Value	%	Value	%	Value	%	Value	%
Global warming	5.69E+00	kgCO ₂ eq.	1.06E+00	19%	5.78E-03	< 1%	2.26E-03	< 1%	4.61E+00	81%	1.02E-02	< 1%
Ozone depletion	1.36E-06	kgCFC-11 eq.	2.40E-07	18%	1.17E-11	< 1%	1.50E-11	< 1%	1.12E-06	82%	1.93E-10	< 1%
Acidification of soils and water	3.61E-02	kgSO ₂ eq.	1.17E-03	3%	2.60E-05	< 1%	1.05E-05	< 1%	3.49E-02	97%	4.04E-05	< 1%
Water eutrophication	1.74E-03	kg(PO ₄) ³⁻ eq.	3.67E-04	21%	5.97E-06	< 1%	7.78E-06	< 1%	1.31E-03	75%	5.40E-05	3%
Photochemical ozone formation	1.82E-03	kgC ₂ H ₄ eq.	1.67E-04	9%	1.85E-06	< 1%	7.47E-07	< 1%	1.65E-03	90%	3.11E-06	< 1%
Depletion of abiotic resources - elements	5.56E-05	kgSb eq.	5.54E-05	100%	2.32E-10	< 1%	9.96E-11	< 1%	2.10E-07	< 1%	5.79E-10	< 1%
Total use of primary energy	9.68E+01	MJ	1.70E+01	18%	7.75E-02	< 1%	2.94E-02	< 1%	7.96E+01	82%	1.13E-01	< 1%
Net use of fresh water	2.52E-02	m ³	1.32E-02	52%	5.18E-07	< 1%	6.21E-07	< 1%	1.20E-02	48%	6.79E-06	< 1%
Depletion of abiotic resources - fossil fuels	6.34E+01	MJ	1.56E+01	25%	8.13E-02	< 1%	3.17E-02	< 1%	4.75E+01	75%	1.42E-01	< 1%
Water pollution	4.14E+02	m ³	2.17E+02	53%	9.51E-01	< 1%	3.50E-01	< 1%	1.94E+02	47%	1.26E+00	< 1%
Air pollution	5.97E+02	m ³	3.98E+02	67%	2.37E-01	< 1%	2.04E-01	< 1%	1.98E+02	33%	9.92E-01	< 1%

The values of the 27 impacts defined in the PCR-ed3-EN-2015 04 02 are available in the digital database of pep-ecopassport.org website.

The environmental impacts are calculated for a configuration composed by 2P+E power socket, Blank plate, Shunted coaxial TV socket, Support and Cover plate.

For products covered by the PEP other than the Reference Product, the environmental impacts of each phase of the lifecycle are assimilated to the impacts of the Reference Product.

Registration N°: LGRP-00620-V01.01-EN	Drafting rules: PEP-PCR-ed3-EN-2015 04 02 Supplemented by PSR-0005-ed2-2016 03 29
Verifier accreditation N°: VH02	Information and reference documents : www.pep-ecopassport.org
Date of issue: 12-2017	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025:2010 Internal <input checked="" type="checkbox"/> External <input type="checkbox"/>	
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»	
Environmental data in alignment with EN 15804 : 2012 + A1 : 2013	

