Product Environmental Profile

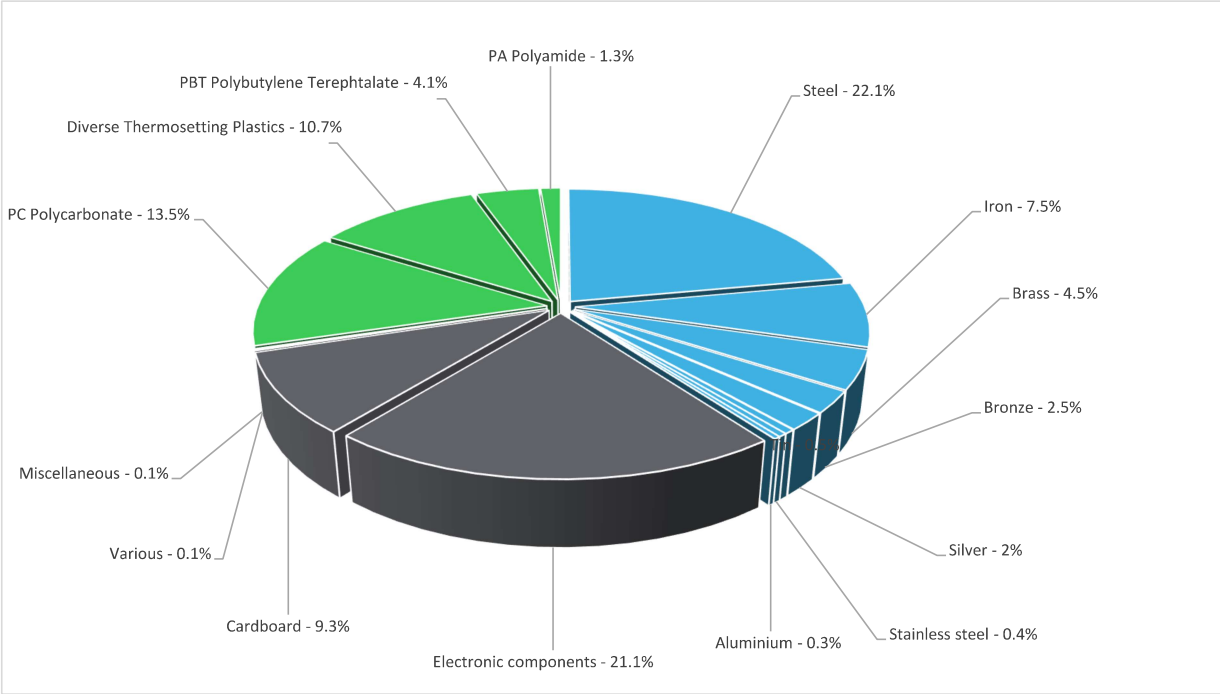
782 Series Power Plug-in Relay

General information

Reference product	782 Series Power Plug-in Relay - 782XBXM4L-240A
Description of the product	The main purpose of the 782 power plug in relay is to control a circuit by a low-power signal with complete electrical isolation between control and controlled circuits or where several circuits must be controlled by one signal.
Functional unit	782 series plug-in general purpose relay offers robust and historically proven square base mounting relay platform that provides excellent structural support with clear cover with LED indication and locking push button. Gold flashed contact DPDT configuration reduces oxidation and increases shelf life gives simultaneous control of separate circuits.This product will be in active mode at 24% in overall power consumption of 1.77 W with life span of 10 years and adhering to UL standards.

Constituent materials

Reference product mass	38.555 g	including the product, its packaging and additional elements and accessories



	Metals	39.80%
	Others	30.60%
	Plastics	29.60%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website
https://www.se.com/ww/en/work/support/green-premium/

Additional environmental information

End Of Life	Recyclability potential:	**43%**	Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

Reference service life time	10 years
Product category	Other equipments - Active product
Installation elements	No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging accounted for during installation.
Use scenario	The product is in active mode 24% of the time with a power use of 1.77 W and in off mode 76% of the time with a power use of 0 W for 10 years
Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are similar and representative of the actual type of technologies used to make the product.
Geographical representativeness	USA

Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; US	Electricity Mix; Production mix; Low voltage; US	Electricity Mix; Production mix; Low voltage; US

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

Mandatory Indicators		782 Series Power Plug-in Relay - 782XBXM4L-240A						
Impact indicators	Unit	Total	Manufacturing [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Loads and Benefits [D]
Contribution to climate change	kg CO2 eq	2.09E+01	5.30E-01	5.04E-03	6.47E-03	2.03E+01	6.22E-02	-7.21E-02
Contribution to climate change-fossil	kg CO2 eq	2.09E+01	5.29E-01	5.04E-03	6.18E-03	2.03E+01	6.22E-02	-7.17E-02
Contribution to climate change-biogenic	kg CO2 eq	2.24E-02	6.57E-04	0*	2.88E-04	2.15E-02	0*	-4.10E-04
Contribution to climate change-land use and land use change	kg CO2 eq	9.75E-09	9.75E-09	0*	0*	0*	0*	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	1.63E-07	7.60E-08	0*	4.28E-10	8.64E-08	3.03E-10	-1.47E-08
Contribution to acidification	mol H+ eq	1.15E-01	6.85E-03	3.24E-05	2.57E-05	1.08E-01	1.58E-04	-4.01E-04
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	3.91E-05	7.68E-06	0*	4.67E-08	3.13E-05	7.73E-09	-2.24E-07
Contribution to eutrophication marine	kg N eq	1.36E-02	7.10E-04	1.52E-05	6.80E-06	1.28E-02	3.03E-05	-4.57E-05
Contribution to eutrophication, terrestrial	mol N eq	1.58E-01	7.67E-03	1.67E-04	5.13E-05	1.50E-01	3.36E-04	-4.93E-04
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.51E-02	2.47E-03	4.22E-05	1.37E-05	4.24E-02	1.17E-04	-1.72E-04
Contribution to resource use, minerals and metals	kg Sb eq	7.14E-04	7.13E-04	0*	0*	8.21E-07	0*	-1.48E-05
Contribution to resource use, fossils	MJ	4.45E+02	9.76E+00	7.02E-02	6.73E-02	4.32E+02	3.16E+00	-1.25E+00
Contribution to water use	m3 eq	1.50E+00	7.50E-01	0*	2.76E-03	7.30E-01	1.79E-02	-3.20E-02

Additional indicators for the French regulation are available as well

Inventory flows Indicators		782 Series Power Plug-in Relay - 782XBXM4L-240A						
Inventory flows	Unit	Total	Manufact. [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Loads and Benefits [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	5.45E+01	3.82E-01	0*	0*	5.41E+01	0*	2.94E-02
Contribution to use of renewable primary energy resources used as raw material	MJ	7.06E-02	7.06E-02	0*	0*	0*	0*	-6.40E-02
Contribution to total use of renewable primary energy resources	MJ	5.46E+01	4.52E-01	0*	0*	5.41E+01	0*	-3.46E-02
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.44E+02	9.29E+00	7.02E-02	6.73E-02	4.32E+02	3.16E+00	-1.25E+00
Contribution to use of non renewable primary energy resources used as raw material	MJ	4.74E-01	4.74E-01	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	4.45E+02	9.76E+00	7.02E-02	6.73E-02	4.32E+02	3.16E+00	-1.25E+00
Contribution to use of secondary material	kg	5.70E-04	5.70E-04	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m^3	3.49E-02	1.75E-02	0*	6.43E-05	1.70E-02	4.16E-04	-7.45E-04
Contribution to hazardous waste disposed	kg	2.26E+00	1.81E+00	0*	0*	3.98E-01	4.88E-02	-1.14E+00
Contribution to non hazardous waste disposed	kg	3.96E+00	9.29E-01	0*	2.10E-02	3.00E+00	6.30E-03	-1.30E-01
Contribution to radioactive waste disposed	kg	1.18E-03	6.05E-04	1.26E-07	2.82E-06	5.66E-04	4.43E-07	-2.19E-05
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.84E-02	0*	0*	3.56E-03	0*	1.49E-02	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

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

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

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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		Supplemented by	PSR-0005-ed2-2016 03 29
Date of issue	10/2023	*Information and reference documents*	www.pep-ecopassport.org
		Validity period	5 years

Independent verification of the declaration and data, in compliance with ISO 14021 : 2016

Internal X External

The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)

PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019

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. Type II environmental declarations »

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