

Product Environmental Profile

XD4 JOYSTICK CONTROLLER

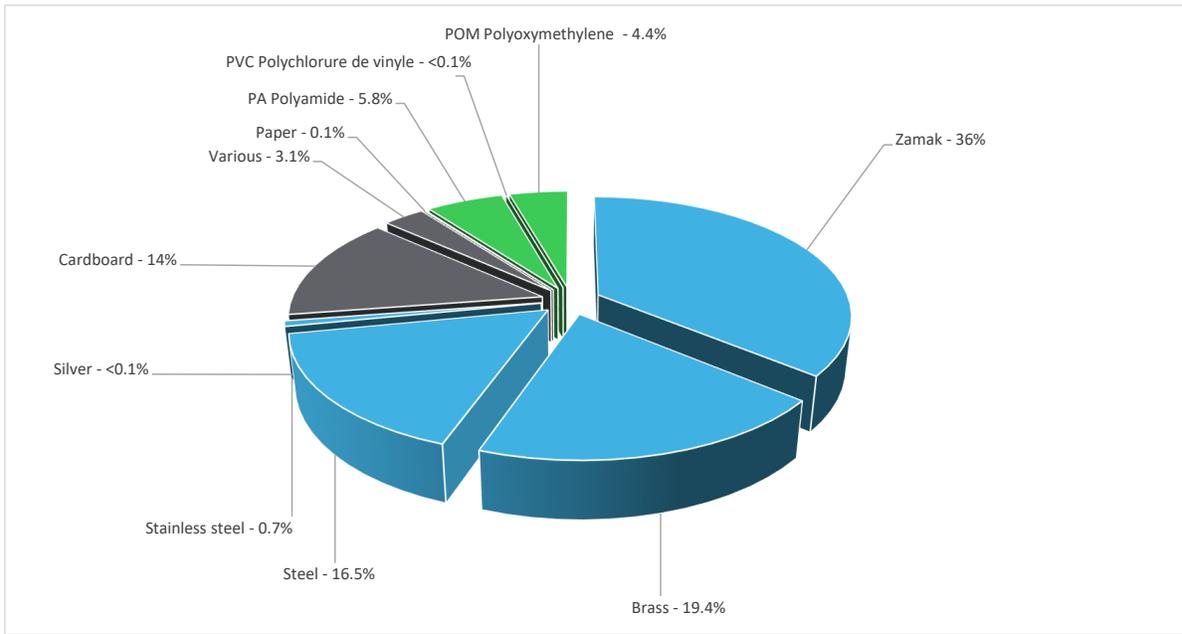


General information

Representative product	XD4 JOYSTICK CONTROLLER - XD4PA22
Description of the product	Joysticks are devices that are used to control, position and steer a wide range of heavy-duty equipment, machines and systems. Joysticks are devices that have a shaft mounted onto a base which houses an electrical circuit
Functional unit	This joystick provides a versatile and intuitive interface for controlling your machines. It is easily installed into a standard 22mm diameter cut-outs and connected to your control circuits with simple screw-clamp connections with power consumption of 0.004W at active phase 7.2% in a 10-year lifespan and adheres to IEC 60947-5-5 and 60947-5-1 standards.

Constituent materials

Reference product mass	113 g including the product, its packaging and additional elements and accessories
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Plastics	10.20%
Metals	72.60%
Others	17.20%

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:	42%	Recyclability rate has been calculated based on REEECYLAB 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).
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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 7.2% of the time with a power use of 0.004W and in off mode 92.8% of the time with with power use of 0W 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	Global			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27
		Electricity Mix; Production mix; Low voltage; CN	Electricity Mix; Production mix; Low voltage; CN	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
		Electricity Mix; Production mix; Low voltage; RU	Electricity Mix; Production mix; Low voltage; RU	Electricity Mix; Production mix; Low voltage; RU
		Electricity Mix; Production mix; Low voltage; BR	Electricity Mix; Production mix; Low voltage; BR	Electricity Mix; Production mix; Low voltage; BR

Detailed results, including all the optional indicators mentioned in PCRred4, 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		XD4 JOYSTICK CONTROLLER - XD4PA22						
Impact indicators	Unit	Total	Manufacturing [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits [D]
Contribution to climate change	kg CO2 eq	9.54E-01	7.43E-01	3.95E-02	1.86E-02	1.20E-02	1.41E-01	-1.19E-01
Contribution to climate change-fossil	kg CO2 eq	9.47E-01	7.36E-01	3.95E-02	1.86E-02	1.20E-02	1.41E-01	-1.19E-01
Contribution to climate change-biogenic	kg CO2 eq	7.07E-03	7.06E-03	0*	0*	1.31E-05	0*	-1.25E-05
Contribution to climate change-land use and land use change	kg CO2 eq	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	2.89E-07	2.53E-07	3.48E-08	3.71E-11	5.37E-11	8.54E-10	-1.86E-11
Contribution to acidification	mol H+ eq	1.01E-02	9.39E-03	1.72E-04	1.28E-05	7.13E-05	4.30E-04	-3.99E-04
Contribution to eutrophication, freshwater	kg (PO4) ³⁻ eq	6.54E-06	6.17E-06	4.62E-09	3.21E-07	2.43E-08	2.10E-08	-2.23E-08
Contribution to eutrophication marine	kg N eq	1.46E-03	1.29E-03	7.92E-05	7.10E-06	8.04E-06	8.24E-05	-6.75E-05
Contribution to eutrophication, terrestrial	mol N eq	1.59E-02	1.39E-02	8.58E-04	5.34E-05	1.12E-04	9.06E-04	-7.36E-04
Contribution to photochemical ozone formation - human health	kg COVM eq	5.01E-03	4.36E-03	2.81E-04	1.81E-05	2.61E-05	3.18E-04	-2.78E-04
Contribution to resource use, minerals and metals	kg Sb eq	1.04E-04	1.04E-04	0*	0*	0*	0*	-4.65E-09
Contribution to resource use, fossils	MJ	2.23E+01	1.29E+01	4.79E-01	2.02E-02	2.74E-01	8.60E+00	-9.12E+00
Contribution to water use	m3 eq	3.85E-01	3.36E-01	2.00E-03	2.01E-04	4.41E-04	4.62E-02	-4.73E-02

Additional indicators for the French regulation are available as well

Inventory flows Indicators		XD4 JOYSTICK CONTROLLER - XD4PA22						
Inventory flows	Unit	Total	Manufact. [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.01E-02	0*	3.21E-06	5.20E-04	5.00E-02	2.67E-04	-2.10E-04
Contribution to use of renewable primary energy resources used as raw material	MJ	3.16E-01	3.16E-01	0*	0*	0*	0*	0.00E+00
Contribution to total use of renewable primary energy resources	MJ	3.36E-01	2.85E-01	0*	5.20E-04	5.00E-02	2.67E-04	-2.10E-04
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.19E+01	1.25E+01	4.79E-01	2.02E-02	2.74E-01	8.60E+00	-9.12E+00
Contribution to use of non renewable primary energy resources used as raw material	MJ	4.09E-01	4.09E-01	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	2.23E+01	1.29E+01	4.79E-01	2.02E-02	2.74E-01	8.60E+00	-9.12E+00
Contribution to use of secondary material	kg	1.23E-05	1.23E-05	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	m³	8.97E-03	7.83E-03	4.66E-05	4.69E-06	1.03E-05	1.07E-03	-1.10E-03
Contribution to hazardous waste disposed	kg	4.25E+00	4.10E+00	0*	0*	0*	1.47E-01	-3.33E-06
Contribution to non hazardous waste disposed	kg	6.41E-01	6.14E-01	0*	1.77E-02	1.79E-03	7.66E-03	-9.16E-04
Contribution to radioactive waste disposed	kg	1.51E-04	1.42E-04	7.85E-06	6.05E-07	3.11E-07	9.43E-07	-1.23E-07
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	4.06E-02	0*	0*	9.49E-05	0*	4.05E-02	-4.38E-02
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	9.05E-03	0*	0*	9.05E-03	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	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>

Manufacturing 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 :	ENVPEP2302014_V1	Drafting rules	PEP-PCR-ed4-2021 09 06
		Supplemented by	PSR-0005-ed2-2016 03 29
Date of issue	08/2023	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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