

Product Environmental Profile

I-Line Busway 4000A Feeder Section (Aluminum)

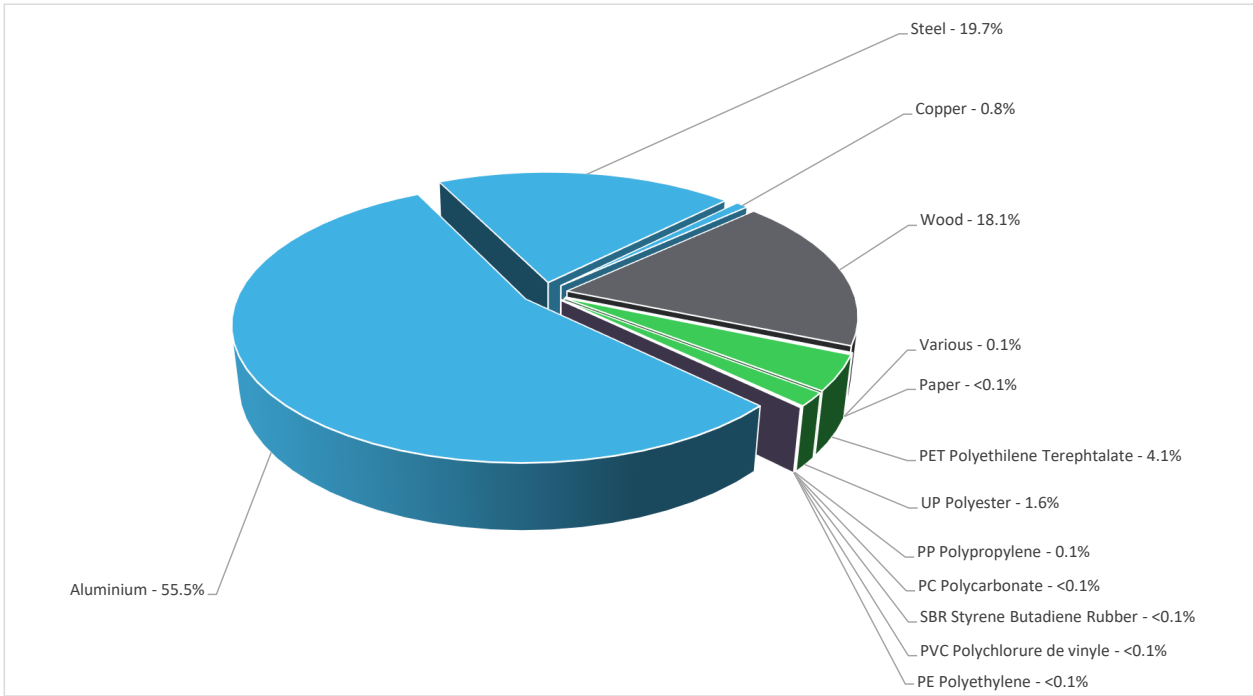


General information

Reference product	I-Line Busway 4000A Feeder Section (Aluminum) - AF2540G10ST
Description of the product	The main purpose of the I-Line I & II Busway Straights and Fittings is to distribute electrical low voltage power in both commercial and industrial applications.
Description of the range	Single product
Functional unit	To transmit energy rated at 4000 A over a distance of 10ft, in accordance with the relevant standards for a reference service life of 20 years.
Specifications are:	Rated voltage :- 600 VAC Rated current :- 4000 A

Constituent materials

Reference product mass	214659.7 g	including the product, its packaging, additional elements and accessories
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Plastics	5.8%
Metals	76.0%
Others	18.2%

Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric website <https://www.se.com>

Additional environmental information

End Of Life	Recyclability potential:	91%	The recyclability rate was calculated from the recycling rates of each material making up the product based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the EIME database and the related PSR was taken. If no data was found a conservative assumption was used (0% recyclability).
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Environmental impacts

Reference service life time	20 years			
Product category	Other equipments - Passive product - continuous operation			
Installation elements	The product doesn't require special installation procedure and requires little to no energy to install.			
Use scenario	Load rate / rated current (In): 30% of In Utilization time rate: 100%			
Time representativeness	The collected data are representative of the year 2024			
Technological representativeness	The Modules of Technologies such as material production, manufacturing processes and transport technology used in the PEP analysis (LCA EIME in the case) are Similar and Representative of the actual type of technologies used to make the product.			
Geographical representativeness	Rest of the World			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Low voltage; 2020; United States, US	Electricity Mix; Low voltage; 2020; United States, US	Electricity Mix; Low voltage; 2020; United States, US	Electricity Mix; Low voltage; 2020; United States, US
		Electricity Mix; Low voltage; 2020; Canada, CA	Electricity Mix; Low voltage; 2020; Canada, CA	Electricity Mix; Low voltage; 2020; Canada, CA
		Electricity Mix; Low voltage; 2020; Mexico, MX	Electricity Mix; Low voltage; 2020; Mexico, MX	Electricity Mix; Low voltage; 2020; Mexico, MX

Detailed results of the optional indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.se.com/contact>

Mandatory Indicators		I-Line Busway 4000A Feeder Section (Aluminum) - AF2540G10ST						
Impact indicators	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to climate change	kg CO2 eq	2.24E+04	1.98E+03	1.78E+02	6.52E+01	1.99E+04	2.30E+02	-1.78E+03
Contribution to climate change-fossil	kg CO2 eq	2.22E+04	2.00E+03	1.78E+02	2.50E+00	1.98E+04	2.30E+02	-1.73E+03
Contribution to climate change-biogenic	kg CO2 eq	1.50E+02	0*	0*	6.27E+01	1.01E+02	3.54E-01	-4.94E+01
Contribution to climate change-land use and land use change	kg CO2 eq	1.10E-04	1.04E-04	0*	0*	0*	5.85E-06	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	5.60E-04	3.23E-04	1.58E-04	8.36E-08	7.56E-05	3.82E-06	-2.43E-04
Contribution to acidification	mol H+ eq	1.08E+02	1.63E+01	7.84E-01	1.67E-02	8.96E+01	8.13E-01	-1.17E+01
Contribution to eutrophication, freshwater	kg P eq	5.34E-02	9.04E-03	2.09E-05	0*	3.30E-02	1.14E-02	-6.39E-03
Contribution to eutrophication, marine	kg N eq	1.35E+01	1.56E+00	3.61E-01	5.16E-03	1.13E+01	2.09E-01	-9.76E-01
Contribution to eutrophication, terrestrial	mol N eq	1.58E+02	1.71E+01	3.91E+00	6.99E-02	1.34E+02	2.29E+00	-1.08E+01
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.51E+01	5.67E+00	1.28E+00	1.42E-02	3.74E+01	7.02E-01	-3.61E+00
Contribution to resource use, minerals and metals	kg Sb eq	1.07E-01	1.03E-01	0*	0*	3.39E-03	3.48E-04	-5.35E-02
Contribution to resource use, fossils	MJ	4.82E+05	3.80E+04	2.22E+03	0*	4.31E+05	1.02E+04	-2.56E+04
Contribution to water use	m3 eq	1.91E+03	7.97E+02	9.06E+00	7.10E+00	1.04E+03	5.92E+01	-3.89E+02

Inventory flows Indicators		I-Line Busway 4000A Feeder Section (Aluminum) - AF2540G10ST						
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to renewable primary energy used as energy	MJ	6.04E+04	1.72E+03	0*	0*	5.87E+04	9.13E+00	-1.08E+03
Contribution to renewable primary energy used as raw material	MJ	8.40E+02	8.40E+02	0*	0*	0*	0*	0.00E+00
Contribution to total renewable primary energy	MJ	6.13E+04	2.56E+03	0*	0*	5.87E+04	9.13E+00	-1.08E+03
Contribution to non renewable primary energy used as energy	MJ	4.81E+05	3.76E+04	2.22E+03	0*	4.31E+05	1.02E+04	-2.56E+04
Contribution to non renewable primary energy used as raw material	MJ	3.62E+02	3.62E+02	0*	0*	0*	0*	0.00E+00
Contribution to total non renewable primary energy	MJ	4.82E+05	3.80E+04	2.22E+03	0*	4.31E+05	1.02E+04	-2.56E+04
Contribution to use of secondary material	kg	0.00E+00	0*	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 fresh water	m³	4.45E+01	1.86E+01	2.11E-01	1.65E-01	2.42E+01	1.38E+00	-9.07E+00
Contribution to hazardous waste disposed	kg	4.91E+03	4.55E+03	0*	0*	3.64E+02	1.42E+00	-4.36E+03
Contribution to non hazardous waste disposed	kg	6.93E+03	3.85E+03	0*	4.16E+01	3.00E+03	3.10E+01	-2.90E+03
Contribution to radioactive waste disposed	kg	3.74E+00	2.99E+00	3.55E-02	1.37E-03	7.10E-01	3.10E-03	-2.26E+00
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.63E+02	1.61E+00	0*	0*	0*	1.61E+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	3.40E+00	1.81E+00	0*	0*	0*	1.59E+00	0.00E+00
* represents less than 0.01% of the total life cycle of the reference flow								
Contribution to biogenic carbon content of the product	kg of C	0.00E+00						
Contribution to biogenic carbon content of the associated packaging	kg of C	1.55E+01						

* The calculation of the biogenic carbon is based on the Ademe for the Cardboard (28%), EN16485 for Wood (39,52%), and APESA/RECORD for Paper (37,8%)

Mandatory Indicators		I-Line Busway 4000A Feeder Section (Aluminum) - AF2540G10ST							
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	1.99E+04	0*	0*	0*	0*	0*	1.99E+04	0*
Contribution to climate change-fossil	kg CO2 eq	1.98E+04	0*	0*	0*	0*	0*	1.98E+04	0*
Contribution to climate change-biogenic	kg CO2 eq	1.01E+02	0*	0*	0*	0*	0*	1.01E+02	0*
Contribution to climate change-land use and land use change	kg CO2 eq	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	7.56E-05	0*	0*	0*	0*	0*	7.56E-05	0*
Contribution to acidification	mol H+ eq	8.96E+01	0*	0*	0*	0*	0*	8.96E+01	0*
Contribution to eutrophication, freshwater	kg P eq	3.30E-02	0*	0*	0*	0*	0*	3.30E-02	0*
Contribution to eutrophication marine	kg N eq	1.13E+01	0*	0*	0*	0*	0*	1.13E+01	0*
Contribution to eutrophication, terrestrial	mol N eq	1.34E+02	0*	0*	0*	0*	0*	1.34E+02	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	3.74E+01	0*	0*	0*	0*	0*	3.74E+01	0*
Contribution to resource use, minerals and metals	kg Sb eq	3.39E-03	0*	0*	0*	0*	0*	3.39E-03	0*
Contribution to resource use, fossils	MJ	4.31E+05	0*	0*	0*	0*	0*	4.31E+05	0*
Contribution to water use	m3 eq	1.04E+03	0*	0*	0*	0*	0*	1.04E+03	0*

Inventory flows Indicators		I-Line Busway 4000A Feeder Section (Aluminum) - AF2540G10ST							
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	5.87E+04	0*	0*	0*	0*	0*	5.87E+04	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	5.87E+04	0*	0*	0*	0*	0*	5.87E+04	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.31E+05	0*	0*	0*	0*	0*	4.31E+05	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	4.31E+05	0*	0*	0*	0*	0*	4.31E+05	0*
Contribution to use of secondary material	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m³	2.42E+01	0*	0*	0*	0*	0*	2.42E+01	0*
Contribution to hazardous waste disposed	kg	3.64E+02	0*	0*	0*	0*	0*	3.64E+02	0*
Contribution to non hazardous waste disposed	kg	3.00E+03	0*	0*	0*	0*	0*	3.00E+03	0*
Contribution to radioactive waste disposed	kg	7.10E-01	0*	0*	0*	0*	0*	7.10E-01	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	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 v6.2.4, database version 2024-01 in compliance with ISO14044, EF3.1 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

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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Date of issue	01-2025	Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
		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)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022			
The components of the present PEP may not be compared with components from any other program.			
Document complies with ISO 14021:2016 "Environmental labels and declarations. Type II environmental declarations"			

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