

PRE-ASSEMBLED CABLE BOX LIDS

Product Environmental Profile

Environmental Product Declaration



Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations"

ORGANIZATION		CONTACT INFORMATION			
ABB b.v.		Jeroen.j.donders@nl.abb.com			
MANUFACTURING ADDRESS		WEBSITE			
Frankeneng 15, 6716 AA, Ede, Netherlands		new.abb.com			
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	1/60
© Copyright 2022 ABB. All rights reserved.					



ABB Purpose & Embedding Sustainability

ABB is committed to continually promoting and embedding sustainability across its operations and value chain, aspiring to become a role model for others to follow.

With its ABB Purpose, ABB is focusing on reducing harmful emissions, preserving natural resources and championing ethical and humane behavior.



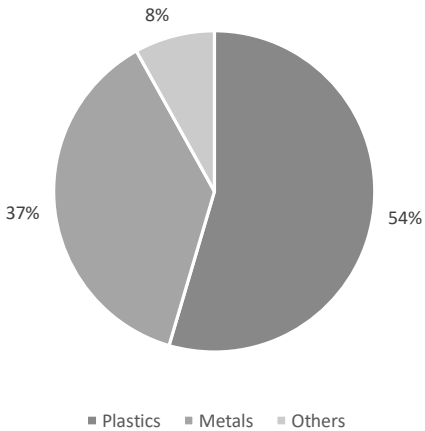
General Information

Reference product	1SPA007130F9585 3640GB33 S
Description of the product	Junction box for creating connections between wires and having 1 or more outputs in the lid for connecting other equipment.
Functional unit	Connect/Disconnect during 20 years the plug of a load consuming 16A under a voltage of 230V while protecting the user from direct contact with live parts and with a protection class IP20 and no specified IK grade.
Other products covered	1SPA007131F9510, 1SPA007131F9570, 1SPA007131F9515, 1SPA007131F9580, 1SPA007131F9600, 1SPA007131F9520, 1SPA007131F9525, 1SPA007131F9545, 1SPA007130F9503, 1SPA007130F9505, 1SPA007130F9506, 1SPA007130F9507, 1SPA007130F9508, 1SPA007130F9509, 1SPA007130F9510, 1SPA007130F9515, 1SPA007130F9517, 1SPA007130F9518, 1SPA007130F9520, 1SPA007130F9522, 1SPA007130F9524, 1SPA007130F9525, 1SPA007130F9526, 1SPA007130F9528, 1SPA007130F9530, 1SPA007130F9535, 1SPA007130F9536, 1SPA007130F9537, 1SPA007130F9538, 1SPA007130F9540, 1SPA007130F9545, 1SPA007130F9560, 1SPA007130F9565, 1SPA007130F9580, 1SPA007130F9585, 1SPA007130F9600, 1SPA007130F9700, 1SPA007130F9705, 1SPA007130F9710, 1SPA007130F9715, 1SPA007131F9210, 1SPA007131F9275, 1SPA007131F9270, 1SPA007131F9215, 1SPA007131F9280, 1SPA007131F9300, 1SPA007131F9220, 1SPA007131F9225, 1SPA007131F9245, 1SPA007131F9230

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	2/60



Constituent materials



Total weight (kg) of Reference product including packaging

2,40E-01

Plastics as % of weight		Metals as % of weight		Others as % of weight	
Name and CAS number	Weight-%	Name and CAS number	Weight-%	Name and CAS number	Weight-%
Plastics	54	Metals	37	Others	0
-	-	-	-	Packaging	8



Additional Environmental Information

Manufacturing	Manufactured at Ede factory in the Netherlands, ISO 14001 certified. In the manufacturing process is considered the raw material including the packaging, its transport to the production site and the manufacturing process itself.
Distribution	Packaging consists of a cardboard box, a pallet and LDPE. The transport distance per product is 150 kilometres, which is based on the default transport distance for the distribution stage from the National Environmental Database (Nationale Milieu Database, hereafter referred to as NMD) Dutch standard Environmental Performance Assessment Method for Construction Works, calculation method to determine environmental performance of construction works throughout their service life, based on EN 15804 (hereafter referred to as NMD Assessment method).
Installation	For the installation of the product, no special installation procedure is required and no significant energy is required to install the products. In some occasions, screws are used to fix products to a surface which is out of the scope of this report.
Use	The product does not require special maintenance operations. The use stage includes energy dissipation which means energy is dissipated due to generation of heat in the system.
End of life	No special end-of-life treatment is required. The waste treatment and disposal scenarios of the materials are based on default waste treatment and disposal scenarios from the Dutch standard NMD Assessment method.
Benefits and loads beyond the system boundaries	Benefits and loads beyond the system boundaries are included

SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Public	ABBG-00120-V01.01-EN	1	en	4/60

Environmental impacts

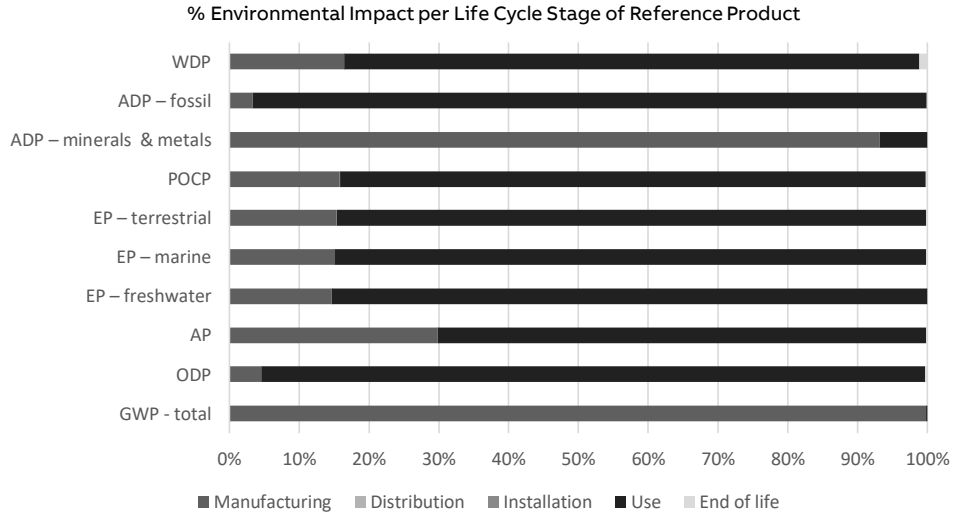
Reference lifetime	20 years
Product category	Sockets
Installation elements	Clickable to standard installation material and accessoires, also te product can be fixated by screws.
Use scenario	Load factor: 50% of In Use rate: 50% of the RLТ
Geographical representativeness	Good quality
Technological representativeness	Good quality
Software and database used	LCA calculations made with Simapro 9.3, with the EN 15804:2019+A2 characterization factors (IPCC AR5) and Ecoinvent version 3.8 database

Energy model used

Manufacturing	Electricity, low voltage {NL} market for Cut-off, S
Installation	Non-applicable
Use	Electricity, low voltage {NL} market for Cut-off, S
End of life	Electricity, low voltage {NL} market for Cut-off, S

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	5/60

Common base of mandatory indicators



Environmental impact indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
GWP-total	kg CO ₂ eq.	5,52E+01	1,73E+00	3,27E-03	9,07E-02	5,30E+01	3,63E-01	-4,12E-01
GWP-fossil	kg CO ₂ eq.	5,45E+01	1,78E+00	3,27E-03	2,03E-03	5,24E+01	3,62E-01	-4,86E-01
GWP-biogenic	kg CO ₂ eq.	6,10E-01	-5,44E-02	2,38E-06	8,86E-02	5,75E-01	6,71E-04	7,43E-02
GWP-luluc	kg CO ₂ eq.	1,77E-02	2,21E-03	9,54E-07	4,56E-07	1,55E-02	3,13E-05	-4,57E-04
GWP-fossil = Global Warming Potential fossil fuels GWP-biogenic = Global Warming Potential biogenic GWP-luluc = Global Warming Potential land use and land use change								
ODP	kg CFC-11 eq.	2,67E-06	1,22E-07	7,68E-10	2,67E-10	2,54E-06	8,28E-09	-3,62E-08
ODP = Depletion potential of the stratospheric ozone layer								
AP	H+ eq.	1,75E-01	5,22E-02	1,37E-05	8,19E-06	1,23E-01	2,90E-04	-2,81E-02
AP = Acidification potential, Accumulated Exceedance								
EP-freshwater	kg P eq.	3,51E-03	5,15E-04	2,49E-08	1,96E-08	2,99E-03	1,01E-06	-2,27E-04
EP-marine	kg N eq.	3,10E-02	4,65E-03	4,13E-06	2,91E-06	2,63E-02	6,45E-05	-1,44E-03
EP-terrestrial	mol N eq.	3,81E-01	5,83E-02	4,57E-05	3,09E-05	3,22E-01	7,08E-04	-2,11E-02
EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment EP-terrestrial = Eutrophication potential, Accumulated Exceedance								
POCP	kg NMVOC eq.	9,50E-02	1,50E-02	1,47E-05	9,95E-06	7,97E-02	2,13E-04	-5,68E-03
POCP = Formation potential of tropo-spheric ozone								
ADP-minerals & metals	kg Sb eq.	3,12E-03	2,91E-03	5,58E-08	4,08E-08	2,11E-04	5,62E-07	-8,25E-04
ADP-fossil	MJ	7,12E+02	2,36E+01	5,08E-02	1,93E-02	6,87E+02	6,52E-01	-6,20E+00
ADP-minerals & metals = Abiotic depletion potential for non-fossil resources ADP-fossil = Abiotic depletion for fossil resources potential								
WDP	m ³ e depr.	6,41E+00	1,06E+00	1,65E-04	7,81E-05	5,28E+00	7,54E-02	-2,52E-01
WDP = Water Deprivation potential								

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	6/60

Common base of mandatory indicators

Inventory flows indicator – Resource use indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
PERE	MJ	7,41E+01	4,97E-03	6,40E-04	5,02E-04	7,41E+01	5,95E-02	-1,93E+00
PERM	MJ	1,81E-01	1,81E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	7,43E+01	1,86E-01	6,40E-04	5,02E-04	7,41E+01	5,95E-02	-1,93E+00
PENRE	MJ	7,58E+02	2,17E+01	5,40E-02	2,04E-02	7,36E+02	6,93E-01	-6,67E+00
PENRM	MJ	3,49E+00	3,49E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	7,62E+02	2,52E+01	5,40E-02	2,04E-02	7,36E+02	6,93E-01	-6,67E+00

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials
 PERM = Use of renewable primary energy resources used as raw materials
 PERT = Total Use of renewable primary energy resources
 PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials
 PENRM = Use of non-renewable primary energy resources used as raw materials
 PENRT = Total Use of non-renewable primary energy re-sources)

Inventory flows indicator – Indicators describing the use of secondary materials, water, and energy re-sources

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
SM	kg	7,88E-02	7,88E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	4,15E-01	4,15E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	4,52E-01	2,81E-02	5,79E-06	3,70E-06	4,21E-01	2,39E-03	-6,85E-03

SM = Use of secondary material
 RSF = Use of renewable secondary fuels
 NRSF = Use of non-renewable secondary fuels
 FW = Use of net fresh water

Inventory flows indicator – Waste category indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Hazardous waste disposed	kg	1,49E-03	9,64E-04	1,23E-07	5,18E-08	5,30E-04	5,66E-07	-8,99E-05
Non- hazardous waste disposed	kg	2,33E+00	2,73E-01	4,42E-03	1,07E-03	2,03E+00	2,68E-02	-1,05E-01
Radioactive waste disposed	kg	1,48E-03	5,90E-05	3,47E-07	1,24E-07	1,42E-03	3,74E-06	-1,26E-05

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	7/60

Common base of mandatory indicators

Inventory flows indicator – Output flow indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	8,88E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,88E-02	0,00E+00
Materials for energy recovery	kg	1,12E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,12E-01	0,00E+00
Exported energy	MJ	5,86E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,86E-01	0,00E+00

Inventory flow indicator – other indicators

Indicator	Unit	Total
Biogenic carbon content of the product	kg of C	5,60E-04
Biogenic carbon content of the associated packaging	kg of C	3,02E-02

Optional indicators

Environmental indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Total use of primary energy during the life cycle	MJ	1,67E+03	5,07E+01	1,09E-01	4,19E-02	1,62E+03	1,50E+00	-1,72E+01
Emissions of fine particles	inci- dence of dis-eases	5,70E-07	1,66E-07	2,95E-10	1,49E-10	4,02E-07	1,69E-09	-6,39E-08
Ionizing radiation, human health	kBq U235 eq.	1,49E+00	6,60E-02	2,22E-04	8,45E-05	1,42E+00	3,05E-03	-1,35E-02
Ecotoxicity (fresh water)	CTUe	1,29E+03	5,93E+02	4,05E-02	2,80E-02	6,98E+02	3,53E+00	-2,73E+02
Human toxicity, car-cinogenic effects	CTUh	1,96E-08	7,18E-09	9,98E-13	1,27E-12	1,20E-08	3,80E-10	-3,87E-09
Human toxicity, non-carcinogenic effects	CTUh	9,11E-07	5,17E-07	4,61E-11	3,44E-11	3,91E-07	2,48E-09	-3,19E-07
Impact related to land use/soil quality	kg	1,61E+02	1,91E+01	5,82E-02	1,32E-02	1,41E+02	2,04E-01	-1,08E+01

Other indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
No Other indicators used								

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	9/60

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9510						
051. Climate change	2,12E-01	4,39E-01	1,01E+00	4,27E-01	4,57E-01	2,86E-01
052. Climate change - Fossil	2,39E-01	4,39E-01	1,41E+00	4,27E-01	4,56E-01	3,92E-01
053. Climate change - Biogenic	1,09E+00	4,39E-01	1,00E+00	4,27E-01	7,63E-01	9,80E-01
054. Climate change - Land use and LU ch	3,76E-01	4,39E-01	1,01E+00	4,27E-01	2,37E-01	4,11E-01
055. Ozone depletion	2,18E-01	4,39E-01	1,01E+00	4,27E-01	2,43E-01	4,29E-01
056. Acidification	1,90E-01	4,39E-01	1,02E+00	4,27E-01	2,86E-01	1,95E-01
057. Eutrophication, freshwater	1,90E-01	4,39E-01	1,01E+00	4,27E-01	2,38E-01	1,99E-01
058. Eutrophication, marine	2,04E-01	4,39E-01	1,02E+00	4,27E-01	3,77E-01	2,32E-01
059. Eutrophication, terrestrial	1,94E-01	4,39E-01	1,02E+00	4,27E-01	3,67E-01	2,20E-01
060. Photochemical ozone formation	1,96E-01	4,39E-01	1,02E+00	4,27E-01	3,40E-01	2,24E-01
061. Resource use, minerals and metals	1,69E-01	4,39E-01	1,00E+00	4,27E-01	2,97E-01	1,74E-01
062. Resource use, fossils	2,45E-01	4,39E-01	1,01E+00	4,27E-01	2,50E-01	4,41E-01
063. Water use	2,40E-01	4,39E-01	1,02E+00	4,27E-01	2,53E-01	2,47E-01
064. Particulate matter	2,02E-01	4,39E-01	1,01E+00	4,27E-01	3,25E-01	2,27E-01
065. Ionising radiation	2,05E-01	4,39E-01	1,00E+00	4,27E-01	2,25E-01	3,36E-01
066. Ecotoxicity, freshwater	1,83E-01	4,39E-01	1,01E+00	4,27E-01	2,51E-01	1,94E-01
067. Human toxicity, cancer	1,89E-01	4,39E-01	1,02E+00	4,27E-01	2,11E-01	1,96E-01
068. Human toxicity, non-cancer	1,85E-01	4,39E-01	1,04E+00	4,27E-01	3,30E-01	1,88E-01
069. Land use	4,26E-01	4,39E-01	1,01E+00	4,27E-01	3,27E-01	7,01E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	10/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9570						
051. Climate change	2,12E-01	4,39E-01	1,01E+00	4,27E-01	4,57E-01	2,86E-01
052. Climate change - Fossil	2,39E-01	4,39E-01	1,41E+00	4,27E-01	4,56E-01	3,92E-01
053. Climate change - Biogenic	1,09E+00	4,39E-01	1,00E+00	4,27E-01	7,63E-01	9,80E-01
054. Climate change - Land use and LU ch	3,76E-01	4,39E-01	1,01E+00	4,27E-01	2,37E-01	4,11E-01
055. Ozone depletion	2,18E-01	4,39E-01	1,01E+00	4,27E-01	2,43E-01	4,29E-01
056. Acidification	1,90E-01	4,39E-01	1,02E+00	4,27E-01	2,86E-01	1,95E-01
057. Eutrophication, freshwater	1,90E-01	4,39E-01	1,01E+00	4,27E-01	2,38E-01	1,99E-01
058. Eutrophication, marine	2,04E-01	4,39E-01	1,02E+00	4,27E-01	3,77E-01	2,32E-01
059. Eutrophication, terrestrial	1,94E-01	4,39E-01	1,02E+00	4,27E-01	3,67E-01	2,20E-01
060. Photochemical ozone formation	1,96E-01	4,39E-01	1,02E+00	4,27E-01	3,40E-01	2,24E-01
061. Resource use, minerals and metals	1,69E-01	4,39E-01	1,00E+00	4,27E-01	2,97E-01	1,74E-01
062. Resource use, fossils	2,45E-01	4,39E-01	1,01E+00	4,27E-01	2,50E-01	4,41E-01
063. Water use	2,40E-01	4,39E-01	1,02E+00	4,27E-01	2,53E-01	2,47E-01
064. Particulate matter	2,02E-01	4,39E-01	1,01E+00	4,27E-01	3,25E-01	2,27E-01
065. Ionising radiation	2,05E-01	4,39E-01	1,00E+00	4,27E-01	2,25E-01	3,36E-01
066. Ecotoxicity, freshwater	1,83E-01	4,39E-01	1,01E+00	4,27E-01	2,51E-01	1,94E-01
067. Human toxicity, cancer	1,89E-01	4,39E-01	1,02E+00	4,27E-01	2,11E-01	1,96E-01
068. Human toxicity, non-cancer	1,85E-01	4,39E-01	1,04E+00	4,27E-01	3,30E-01	1,88E-01
069. Land use	4,26E-01	4,39E-01	1,01E+00	4,27E-01	3,27E-01	7,01E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	11/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9515						
051. Climate change	3,51E-01	5,24E-01	1,01E+00	7,72E-01	5,39E-01	3,88E-01
052. Climate change - Fossil	3,73E-01	5,24E-01	1,41E+00	7,72E-01	5,38E-01	4,79E-01
053. Climate change - Biogenic	1,07E+00	5,24E-01	1,00E+00	7,72E-01	7,96E-01	9,82E-01
054. Climate change - Land use and LU ch	4,87E-01	5,24E-01	1,01E+00	7,72E-01	3,40E-01	4,96E-01
055. Ozone depletion	3,44E-01	5,24E-01	1,01E+00	7,72E-01	3,43E-01	5,10E-01
056. Acidification	3,06E-01	5,24E-01	1,02E+00	7,72E-01	3,85E-01	2,99E-01
057. Eutrophication, freshwater	3,15E-01	5,24E-01	1,01E+00	7,72E-01	3,42E-01	3,03E-01
058. Eutrophication, marine	3,37E-01	5,24E-01	1,02E+00	7,72E-01	4,66E-01	3,34E-01
059. Eutrophication, terrestrial	3,25E-01	5,24E-01	1,02E+00	7,72E-01	4,57E-01	3,23E-01
060. Photochemical ozone formation	3,26E-01	5,24E-01	1,02E+00	7,72E-01	4,33E-01	3,26E-01
061. Resource use, minerals and metals	3,28E-01	5,24E-01	1,00E+00	7,72E-01	3,84E-01	3,19E-01
062. Resource use, fossils	3,78E-01	5,24E-01	1,01E+00	7,72E-01	3,52E-01	5,22E-01
063. Water use	3,67E-01	5,24E-01	1,02E+00	7,72E-01	3,27E-01	3,49E-01
064. Particulate matter	3,28E-01	5,24E-01	1,01E+00	7,72E-01	4,21E-01	3,28E-01
065. Ionising radiation	3,49E-01	5,24E-01	1,00E+00	7,72E-01	3,31E-01	4,34E-01
066. Ecotoxicity, freshwater	3,08E-01	5,24E-01	1,01E+00	7,72E-01	3,30E-01	2,99E-01
067. Human toxicity, cancer	3,07E-01	5,24E-01	1,02E+00	7,72E-01	3,20E-01	3,01E-01
068. Human toxicity, non-cancer	2,96E-01	5,24E-01	1,04E+00	7,72E-01	4,20E-01	2,93E-01
069. Land use	5,23E-01	5,24E-01	1,01E+00	7,72E-01	4,17E-01	7,41E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	12/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9580						
051. Climate change	5,63E-01	6,78E-01	1,01E+00	9,17E-01	6,88E-01	5,86E-01
052. Climate change - Fossil	5,78E-01	6,78E-01	1,41E+00	9,17E-01	6,87E-01	6,48E-01
053. Climate change - Biogenic	1,05E+00	6,78E-01	1,00E+00	9,17E-01	8,62E-01	9,87E-01
054. Climate change - Land use and LU ch	6,56E-01	6,78E-01	1,01E+00	9,17E-01	5,54E-01	6,59E-01
055. Ozone depletion	5,59E-01	6,78E-01	1,01E+00	9,17E-01	5,55E-01	6,69E-01
056. Acidification	5,31E-01	6,78E-01	1,02E+00	9,17E-01	5,84E-01	5,24E-01
057. Eutrophication, freshwater	5,38E-01	6,78E-01	1,01E+00	9,17E-01	5,55E-01	5,27E-01
058. Eutrophication, marine	5,54E-01	6,78E-01	1,02E+00	9,17E-01	6,39E-01	5,48E-01
059. Eutrophication, terrestrial	5,46E-01	6,78E-01	1,02E+00	9,17E-01	6,33E-01	5,41E-01
060. Photochemical ozone formation	5,46E-01	6,78E-01	1,02E+00	9,17E-01	6,17E-01	5,43E-01
061. Resource use, minerals and metals	5,51E-01	6,78E-01	1,00E+00	9,17E-01	5,84E-01	5,44E-01
062. Resource use, fossils	5,82E-01	6,78E-01	1,01E+00	9,17E-01	5,62E-01	6,77E-01
063. Water use	5,72E-01	6,78E-01	1,02E+00	9,17E-01	5,46E-01	5,59E-01
064. Particulate matter	5,47E-01	6,78E-01	1,01E+00	9,17E-01	6,09E-01	5,44E-01
065. Ionising radiation	5,64E-01	6,78E-01	1,00E+00	9,17E-01	5,47E-01	6,17E-01
066. Ecotoxicity, freshwater	5,33E-01	6,78E-01	1,01E+00	9,17E-01	5,47E-01	5,24E-01
067. Human toxicity, cancer	5,32E-01	6,78E-01	1,02E+00	9,17E-01	5,40E-01	5,26E-01
068. Human toxicity, non-cancer	5,23E-01	6,78E-01	1,04E+00	9,17E-01	6,08E-01	5,20E-01
069. Land use	6,79E-01	6,78E-01	1,01E+00	9,17E-01	6,06E-01	8,24E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	13/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9600						
051. Climate change	5,55E-01	6,63E-01	1,01E+00	5,96E-01	6,74E-01	5,64E-01
052. Climate change - Fossil	5,70E-01	6,63E-01	1,41E+00	5,96E-01	6,74E-01	6,28E-01
053. Climate change - Biogenic	1,05E+00	6,63E-01	1,00E+00	5,96E-01	8,53E-01	9,86E-01
054. Climate change - Land use and LU ch	6,48E-01	6,63E-01	1,01E+00	5,96E-01	5,23E-01	6,40E-01
055. Ozone depletion	5,39E-01	6,63E-01	1,01E+00	5,96E-01	5,23E-01	6,50E-01
056. Acidification	5,04E-01	6,63E-01	1,02E+00	5,96E-01	5,57E-01	4,91E-01
057. Eutrophication, freshwater	5,16E-01	6,63E-01	1,01E+00	5,96E-01	5,25E-01	4,94E-01
058. Eutrophication, marine	5,40E-01	6,63E-01	1,02E+00	5,96E-01	6,18E-01	5,18E-01
059. Eutrophication, terrestrial	5,28E-01	6,63E-01	1,02E+00	5,96E-01	6,12E-01	5,09E-01
060. Photochemical ozone formation	5,28E-01	6,63E-01	1,02E+00	5,96E-01	5,94E-01	5,12E-01
061. Resource use, minerals and metals	5,46E-01	6,63E-01	1,00E+00	5,96E-01	5,48E-01	5,32E-01
062. Resource use, fossils	5,74E-01	6,63E-01	1,01E+00	5,96E-01	5,32E-01	6,60E-01
063. Water use	5,63E-01	6,63E-01	1,02E+00	5,96E-01	4,92E-01	5,31E-01
064. Particulate matter	5,28E-01	6,63E-01	1,01E+00	5,96E-01	5,85E-01	5,12E-01
065. Ionising radiation	5,56E-01	6,63E-01	1,00E+00	5,96E-01	5,17E-01	5,97E-01
066. Ecotoxicity, freshwater	5,11E-01	6,63E-01	1,01E+00	5,96E-01	4,98E-01	4,91E-01
067. Human toxicity, cancer	5,06E-01	6,63E-01	1,02E+00	5,96E-01	5,11E-01	4,94E-01
068. Human toxicity, non-cancer	4,92E-01	6,63E-01	1,04E+00	5,96E-01	5,80E-01	4,86E-01
069. Land use	6,69E-01	6,63E-01	1,01E+00	5,96E-01	5,78E-01	8,12E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	14/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9520						
051. Climate change	4,95E-01	6,18E-01	1,01E+00	1,12E+00	6,30E-01	5,03E-01
052. Climate change - Fossil	5,12E-01	6,18E-01	1,41E+00	1,12E+00	6,30E-01	5,76E-01
053. Climate change - Biogenic	1,05E+00	6,18E-01	1,00E+00	1,12E+00	8,35E-01	9,84E-01
054. Climate change - Land use and LU ch	6,03E-01	6,18E-01	1,01E+00	1,12E+00	4,60E-01	5,90E-01
055. Ozone depletion	4,83E-01	6,18E-01	1,01E+00	1,12E+00	4,61E-01	6,02E-01
056. Acidification	4,34E-01	6,18E-01	1,02E+00	1,12E+00	4,98E-01	4,17E-01
057. Eutrophication, freshwater	4,50E-01	6,18E-01	1,01E+00	1,12E+00	4,63E-01	4,21E-01
058. Eutrophication, marine	4,77E-01	6,18E-01	1,02E+00	1,12E+00	5,67E-01	4,48E-01
059. Eutrophication, terrestrial	4,64E-01	6,18E-01	1,02E+00	1,12E+00	5,60E-01	4,38E-01
060. Photochemical ozone formation	4,63E-01	6,18E-01	1,02E+00	1,12E+00	5,40E-01	4,41E-01
061. Resource use, minerals and metals	4,88E-01	6,18E-01	1,00E+00	1,12E+00	4,97E-01	4,70E-01
062. Resource use, fossils	5,17E-01	6,18E-01	1,01E+00	1,12E+00	4,70E-01	6,13E-01
063. Water use	5,01E-01	6,18E-01	1,02E+00	1,12E+00	4,45E-01	4,64E-01
064. Particulate matter	4,63E-01	6,18E-01	1,01E+00	1,12E+00	5,32E-01	4,42E-01
065. Ionising radiation	4,98E-01	6,18E-01	1,00E+00	1,12E+00	4,52E-01	5,41E-01
066. Ecotoxicity, freshwater	4,43E-01	6,18E-01	1,01E+00	1,12E+00	4,47E-01	4,17E-01
067. Human toxicity, cancer	4,36E-01	6,18E-01	1,02E+00	1,12E+00	4,42E-01	4,20E-01
068. Human toxicity, non-cancer	4,20E-01	6,18E-01	1,04E+00	1,12E+00	5,28E-01	4,12E-01
069. Land use	6,25E-01	6,18E-01	1,01E+00	1,12E+00	5,26E-01	7,86E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	15/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9525						
051. Climate change	6,48E-01	7,26E-01	1,01E+00	9,50E-01	7,34E-01	6,41E-01
052. Climate change - Fossil	6,60E-01	7,26E-01	1,41E+00	9,50E-01	7,33E-01	6,94E-01
053. Climate change - Biogenic	1,03E+00	7,26E-01	1,00E+00	9,50E-01	8,81E-01	9,88E-01
054. Climate change - Land use and LU ch	7,26E-01	7,26E-01	1,01E+00	9,50E-01	6,09E-01	7,05E-01
055. Ozone depletion	6,36E-01	7,26E-01	1,01E+00	9,50E-01	6,07E-01	7,13E-01
056. Acidification	5,92E-01	7,26E-01	1,02E+00	9,50E-01	6,36E-01	5,74E-01
057. Eutrophication, freshwater	6,09E-01	7,26E-01	1,01E+00	9,50E-01	6,11E-01	5,77E-01
058. Eutrophication, marine	6,33E-01	7,26E-01	1,02E+00	9,50E-01	6,87E-01	5,98E-01
059. Eutrophication, terrestrial	6,23E-01	7,26E-01	1,02E+00	9,50E-01	6,82E-01	5,91E-01
060. Photochemical ozone formation	6,21E-01	7,26E-01	1,02E+00	9,50E-01	6,67E-01	5,93E-01
061. Resource use, minerals and metals	6,53E-01	7,26E-01	1,00E+00	9,50E-01	6,31E-01	6,34E-01
062. Resource use, fossils	6,64E-01	7,26E-01	1,01E+00	9,50E-01	6,15E-01	7,21E-01
063. Water use	6,47E-01	7,26E-01	1,02E+00	9,50E-01	5,84E-01	6,12E-01
064. Particulate matter	6,19E-01	7,26E-01	1,01E+00	9,50E-01	6,62E-01	5,93E-01
065. Ionising radiation	6,55E-01	7,26E-01	1,00E+00	9,50E-01	6,03E-01	6,70E-01
066. Ecotoxicity, freshwater	6,04E-01	7,26E-01	1,01E+00	9,50E-01	5,88E-01	5,75E-01
067. Human toxicity, cancer	5,95E-01	7,26E-01	1,02E+00	9,50E-01	5,96E-01	5,78E-01
068. Human toxicity, non-cancer	5,79E-01	7,26E-01	1,04E+00	9,50E-01	6,56E-01	5,71E-01
069. Land use	7,38E-01	7,26E-01	1,01E+00	9,50E-01	6,55E-01	8,44E-01

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	16/60

© Copyright 2022 ABB. All rights reserved.

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9545						
051. Climate change	6,51E-01	7,30E-01	1,01E+00	9,50E-01	7,38E-01	6,48E-01
052. Climate change - Fossil	6,63E-01	7,30E-01	1,41E+00	9,50E-01	7,38E-01	7,00E-01
053. Climate change - Biogenic	1,03E+00	7,30E-01	1,00E+00	9,50E-01	8,83E-01	9,88E-01
054. Climate change - Land use and LU ch	7,28E-01	7,30E-01	1,01E+00	9,50E-01	6,17E-01	7,11E-01
055. Ozone depletion	6,41E-01	7,30E-01	1,01E+00	9,50E-01	6,16E-01	7,18E-01
056. Acidification	6,00E-01	7,30E-01	1,02E+00	9,50E-01	6,44E-01	5,84E-01
057. Eutrophication, freshwater	6,16E-01	7,30E-01	1,01E+00	9,50E-01	6,19E-01	5,87E-01
058. Eutrophication, marine	6,38E-01	7,30E-01	1,02E+00	9,50E-01	6,93E-01	6,08E-01
059. Eutrophication, terrestrial	6,28E-01	7,30E-01	1,02E+00	9,50E-01	6,88E-01	6,00E-01
060. Photochemical ozone formation	6,26E-01	7,30E-01	1,02E+00	9,50E-01	6,74E-01	6,03E-01
061. Resource use, minerals and metals	6,55E-01	7,30E-01	1,00E+00	9,50E-01	6,40E-01	6,38E-01
062. Resource use, fossils	6,66E-01	7,30E-01	1,01E+00	9,50E-01	6,24E-01	7,26E-01
063. Water use	6,51E-01	7,30E-01	1,02E+00	9,50E-01	5,97E-01	6,20E-01
064. Particulate matter	6,25E-01	7,30E-01	1,01E+00	9,50E-01	6,69E-01	6,02E-01
065. Ionising radiation	6,58E-01	7,30E-01	1,00E+00	9,50E-01	6,11E-01	6,77E-01
066. Ecotoxicity, freshwater	6,10E-01	7,30E-01	1,01E+00	9,50E-01	6,00E-01	5,85E-01
067. Human toxicity, cancer	6,03E-01	7,30E-01	1,02E+00	9,50E-01	6,05E-01	5,88E-01
068. Human toxicity, non-cancer	5,89E-01	7,30E-01	1,04E+00	9,50E-01	6,63E-01	5,81E-01
069. Land use	7,41E-01	7,30E-01	1,01E+00	9,50E-01	6,62E-01	8,48E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	17/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9503						
051. Climate change	1,78E-01	3,85E-01	1,00E+00	3,25E-01	4,08E-01	2,00E-01
052. Climate change - Fossil	2,06E-01	3,85E-01	1,00E+00	3,25E-01	4,07E-01	3,18E-01
053. Climate change - Biogenic	1,09E+00	3,85E-01	1,00E+00	3,25E-01	7,34E-01	9,75E-01
054. Climate change - Land use and LU ch	3,47E-01	3,85E-01	1,00E+00	3,25E-01	1,30E-01	3,38E-01
055. Ozone depletion	1,54E-01	3,85E-01	1,00E+00	3,25E-01	1,33E-01	3,60E-01
056. Acidification	8,92E-02	3,85E-01	1,00E+00	3,25E-01	1,92E-01	6,81E-02
057. Eutrophication, freshwater	1,08E-01	3,85E-01	1,00E+00	3,25E-01	1,34E-01	7,42E-02
058. Eutrophication, marine	1,51E-01	3,85E-01	1,00E+00	3,25E-01	3,06E-01	1,17E-01
059. Eutrophication, terrestrial	1,29E-01	3,85E-01	1,00E+00	3,25E-01	2,94E-01	1,01E-01
060. Photochemical ozone formation	1,29E-01	3,85E-01	1,00E+00	3,25E-01	2,61E-01	1,06E-01
061. Resource use, minerals and metals	1,52E-01	3,85E-01	1,00E+00	3,25E-01	1,87E-01	1,31E-01
062. Resource use, fossils	2,13E-01	3,85E-01	1,00E+00	3,25E-01	1,47E-01	3,76E-01
063. Water use	1,98E-01	3,85E-01	1,00E+00	3,25E-01	1,00E-01	1,40E-01
064. Particulate matter	1,32E-01	3,85E-01	1,00E+00	3,25E-01	2,45E-01	1,07E-01
065. Ionising radiation	1,74E-01	3,85E-01	1,00E+00	3,25E-01	1,18E-01	2,59E-01
066. Ecotoxicity, freshwater	9,79E-02	3,85E-01	1,00E+00	3,25E-01	1,06E-01	6,85E-02
067. Human toxicity, cancer	9,14E-02	3,85E-01	1,00E+00	3,25E-01	1,04E-01	7,29E-02
068. Human toxicity, non-cancer	6,96E-02	3,85E-01	1,00E+00	3,25E-01	2,40E-01	5,99E-02
069. Land use	3,87E-01	3,85E-01	1,00E+00	3,25E-01	2,36E-01	6,57E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	18/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9505						
051. Climate change	2,14E-01	4,39E-01	1,00E+00	3,25E-01	4,59E-01	2,85E-01
052. Climate change - Fossil	2,41E-01	4,39E-01	1,00E+00	3,25E-01	4,59E-01	3,91E-01
053. Climate change - Biogenic	1,09E+00	4,39E-01	1,00E+00	3,25E-01	7,63E-01	9,80E-01
054. Climate change - Land use and LU ch	3,76E-01	4,39E-01	1,00E+00	3,25E-01	2,37E-01	4,10E-01
055. Ozone depletion	2,19E-01	4,39E-01	1,00E+00	3,25E-01	2,44E-01	4,29E-01
056. Acidification	1,90E-01	4,39E-01	1,00E+00	3,25E-01	2,87E-01	1,95E-01
057. Eutrophication, freshwater	1,90E-01	4,39E-01	1,00E+00	3,25E-01	2,38E-01	1,99E-01
058. Eutrophication, marine	2,05E-01	4,39E-01	1,00E+00	3,25E-01	3,78E-01	2,32E-01
059. Eutrophication, terrestrial	1,94E-01	4,39E-01	1,00E+00	3,25E-01	3,68E-01	2,20E-01
060. Photochemical ozone formation	1,97E-01	4,39E-01	1,00E+00	3,25E-01	3,41E-01	2,24E-01
061. Resource use, minerals and metals	1,69E-01	4,39E-01	1,00E+00	3,25E-01	2,98E-01	1,74E-01
062. Resource use, fossils	2,46E-01	4,39E-01	1,00E+00	3,25E-01	2,50E-01	4,40E-01
063. Water use	2,43E-01	4,39E-01	1,00E+00	3,25E-01	2,53E-01	2,46E-01
064. Particulate matter	2,03E-01	4,39E-01	1,00E+00	3,25E-01	3,26E-01	2,27E-01
065. Ionising radiation	2,05E-01	4,39E-01	1,00E+00	3,25E-01	2,25E-01	3,36E-01
066. Ecotoxicity, freshwater	1,83E-01	4,39E-01	1,00E+00	3,25E-01	2,52E-01	1,94E-01
067. Human toxicity, cancer	1,90E-01	4,39E-01	1,00E+00	3,25E-01	2,11E-01	1,96E-01
068. Human toxicity, non-cancer	1,85E-01	4,39E-01	1,00E+00	3,25E-01	3,32E-01	1,88E-01
069. Land use	4,26E-01	4,39E-01	1,00E+00	3,25E-01	3,28E-01	7,01E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	19/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9506						
051. Climate change	1,80E-01	3,84E-01	9,99E-01	3,25E-01	4,08E-01	2,01E-01
052. Climate change - Fossil	2,08E-01	3,84E-01	9,99E-01	3,25E-01	4,08E-01	3,19E-01
053. Climate change - Biogenic	1,09E+00	3,84E-01	1,00E+00	3,25E-01	7,34E-01	9,75E-01
054. Climate change - Land use and LU ch	3,47E-01	3,84E-01	9,99E-01	3,25E-01	1,30E-01	3,38E-01
055. Ozone depletion	1,55E-01	3,84E-01	9,99E-01	3,25E-01	1,32E-01	3,61E-01
056. Acidification	8,94E-02	3,84E-01	9,99E-01	3,25E-01	1,92E-01	6,82E-02
057. Eutrophication, freshwater	1,08E-01	3,84E-01	9,99E-01	3,25E-01	1,33E-01	7,42E-02
058. Eutrophication, marine	1,51E-01	3,84E-01	9,99E-01	3,25E-01	3,04E-01	1,17E-01
059. Eutrophication, terrestrial	1,30E-01	3,84E-01	9,99E-01	3,25E-01	2,92E-01	1,02E-01
060. Photochemical ozone formation	1,29E-01	3,84E-01	9,99E-01	3,25E-01	2,60E-01	1,06E-01
061. Resource use, minerals and metals	1,52E-01	3,84E-01	9,99E-01	3,25E-01	1,87E-01	1,31E-01
062. Resource use, fossils	2,16E-01	3,84E-01	9,99E-01	3,25E-01	1,47E-01	3,77E-01
063. Water use	2,00E-01	3,84E-01	9,98E-01	3,25E-01	9,89E-02	1,40E-01
064. Particulate matter	1,32E-01	3,84E-01	9,99E-01	3,25E-01	2,44E-01	1,07E-01
065. Ionising radiation	1,75E-01	3,84E-01	9,99E-01	3,25E-01	1,18E-01	2,60E-01
066. Ecotoxicity, freshwater	9,80E-02	3,84E-01	9,99E-01	3,25E-01	1,05E-01	6,85E-02
067. Human toxicity, cancer	9,16E-02	3,84E-01	9,99E-01	3,25E-01	1,04E-01	7,29E-02
068. Human toxicity, non-cancer	6,97E-02	3,84E-01	9,99E-01	3,25E-01	2,38E-01	5,99E-02
069. Land use	3,87E-01	3,84E-01	9,99E-01	3,25E-01	2,36E-01	6,57E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	20/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9507						
051. Climate change	1,81E-01	4,11E-01	1,11E+00	3,25E-01	4,07E-01	2,12E-01
052. Climate change - Fossil	2,09E-01	4,11E-01	1,20E+00	3,25E-01	4,05E-01	3,28E-01
053. Climate change - Biogenic	1,09E+00	4,11E-01	1,11E+00	3,25E-01	1,59E+00	9,74E-01
054. Climate change - Land use and LU ch	4,29E-01	4,11E-01	1,26E+00	3,25E-01	1,30E-01	4,05E-01
055. Ozone depletion	1,61E-01	4,11E-01	1,22E+00	3,25E-01	1,32E-01	3,77E-01
056. Acidification	8,97E-02	4,11E-01	1,27E+00	3,25E-01	1,91E-01	6,91E-02
057. Eutrophication, freshwater	1,09E-01	4,11E-01	1,29E+00	3,25E-01	1,33E-01	7,57E-02
058. Eutrophication, marine	1,52E-01	4,11E-01	1,28E+00	3,25E-01	3,03E-01	1,24E-01
059. Eutrophication, terrestrial	1,31E-01	4,11E-01	1,27E+00	3,25E-01	2,91E-01	1,06E-01
060. Photochemical ozone formation	1,30E-01	4,11E-01	1,28E+00	3,25E-01	2,59E-01	1,10E-01
061. Resource use, minerals and metals	1,52E-01	4,11E-01	1,29E+00	3,25E-01	1,87E-01	1,31E-01
062. Resource use, fossils	2,18E-01	4,11E-01	1,23E+00	3,25E-01	1,46E-01	3,87E-01
063. Water use	1,98E-01	4,11E-01	1,34E+00	3,25E-01	9,81E-02	1,47E-01
064. Particulate matter	1,34E-01	4,11E-01	1,26E+00	3,25E-01	2,44E-01	1,14E-01
065. Ionising radiation	1,79E-01	4,11E-01	1,23E+00	3,25E-01	1,18E-01	2,77E-01
066. Ecotoxicity, freshwater	9,90E-02	4,11E-01	1,29E+00	3,25E-01	1,04E-01	7,10E-02
067. Human toxicity, cancer	9,29E-02	4,11E-01	1,30E+00	3,25E-01	1,04E-01	7,36E-02
068. Human toxicity, non-cancer	6,98E-02	4,11E-01	1,26E+00	3,25E-01	2,36E-01	6,01E-02
069. Land use	4,00E-01	4,11E-01	1,15E+00	3,25E-01	2,35E-01	6,78E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	21/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9508						
051. Climate change	2,16E-01	4,39E-01	1,00E+00	3,25E-01	4,60E-01	2,87E-01
052. Climate change - Fossil	2,42E-01	4,39E-01	1,00E+00	3,25E-01	4,59E-01	3,93E-01
053. Climate change - Biogenic	1,09E+00	4,39E-01	1,00E+00	3,25E-01	7,63E-01	9,80E-01
054. Climate change - Land use and LU ch	3,77E-01	4,39E-01	1,00E+00	3,25E-01	2,37E-01	4,11E-01
055. Ozone depletion	2,19E-01	4,39E-01	1,00E+00	3,25E-01	2,43E-01	4,30E-01
056. Acidification	1,90E-01	4,39E-01	1,00E+00	3,25E-01	2,86E-01	1,95E-01
057. Eutrophication, freshwater	1,90E-01	4,39E-01	1,00E+00	3,25E-01	2,38E-01	1,99E-01
058. Eutrophication, marine	2,05E-01	4,39E-01	1,00E+00	3,25E-01	3,77E-01	2,32E-01
059. Eutrophication, terrestrial	1,94E-01	4,39E-01	1,00E+00	3,25E-01	3,67E-01	2,20E-01
060. Photochemical ozone formation	1,97E-01	4,39E-01	1,00E+00	3,25E-01	3,40E-01	2,24E-01
061. Resource use, minerals and metals	1,69E-01	4,39E-01	1,00E+00	3,25E-01	2,97E-01	1,74E-01
062. Resource use, fossils	2,49E-01	4,39E-01	1,00E+00	3,25E-01	2,50E-01	4,42E-01
063. Water use	2,45E-01	4,39E-01	1,00E+00	3,25E-01	2,52E-01	2,47E-01
064. Particulate matter	2,04E-01	4,39E-01	1,00E+00	3,25E-01	3,26E-01	2,27E-01
065. Ionising radiation	2,06E-01	4,39E-01	1,00E+00	3,25E-01	2,25E-01	3,37E-01
066. Ecotoxicity, freshwater	1,83E-01	4,39E-01	1,00E+00	3,25E-01	2,50E-01	1,94E-01
067. Human toxicity, cancer	1,90E-01	4,39E-01	1,00E+00	3,25E-01	2,11E-01	1,96E-01
068. Human toxicity, non-cancer	1,85E-01	4,39E-01	1,00E+00	3,25E-01	3,30E-01	1,88E-01
069. Land use	4,26E-01	4,39E-01	1,00E+00	3,25E-01	3,28E-01	7,01E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	22/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9509						
051. Climate change	2,17E-01	4,66E-01	1,11E+00	3,25E-01	4,58E-01	2,98E-01
052. Climate change - Fossil	2,43E-01	4,66E-01	1,21E+00	3,25E-01	4,56E-01	4,02E-01
053. Climate change - Biogenic	1,09E+00	4,66E-01	1,11E+00	3,25E-01	1,62E+00	9,79E-01
054. Climate change - Land use and LU ch	4,58E-01	4,66E-01	1,26E+00	3,25E-01	2,36E-01	4,78E-01
055. Ozone depletion	2,25E-01	4,66E-01	1,22E+00	3,25E-01	2,43E-01	4,46E-01
056. Acidification	1,91E-01	4,66E-01	1,27E+00	3,25E-01	2,85E-01	1,96E-01
057. Eutrophication, freshwater	1,90E-01	4,66E-01	1,30E+00	3,25E-01	2,37E-01	2,01E-01
058. Eutrophication, marine	2,06E-01	4,66E-01	1,28E+00	3,25E-01	3,75E-01	2,39E-01
059. Eutrophication, terrestrial	1,95E-01	4,66E-01	1,27E+00	3,25E-01	3,66E-01	2,24E-01
060. Photochemical ozone formation	1,98E-01	4,66E-01	1,28E+00	3,25E-01	3,39E-01	2,27E-01
061. Resource use, minerals and metals	1,70E-01	4,66E-01	1,29E+00	3,25E-01	2,97E-01	1,74E-01
062. Resource use, fossils	2,51E-01	4,66E-01	1,23E+00	3,25E-01	2,50E-01	4,52E-01
063. Water use	2,43E-01	4,66E-01	1,34E+00	3,25E-01	2,51E-01	2,54E-01
064. Particulate matter	2,06E-01	4,66E-01	1,26E+00	3,25E-01	3,25E-01	2,33E-01
065. Ionising radiation	2,10E-01	4,66E-01	1,24E+00	3,25E-01	2,25E-01	3,54E-01
066. Ecotoxicity, freshwater	1,84E-01	4,66E-01	1,29E+00	3,25E-01	2,50E-01	1,96E-01
067. Human toxicity, cancer	1,91E-01	4,66E-01	1,30E+00	3,25E-01	2,10E-01	1,97E-01
068. Human toxicity, non-cancer	1,85E-01	4,66E-01	1,26E+00	3,25E-01	3,28E-01	1,88E-01
069. Land use	4,39E-01	4,66E-01	1,15E+00	3,25E-01	3,27E-01	7,22E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	23/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9510						
051. Climate change	3,22E-01	4,76E-01	1,00E+00	5,93E-01	4,97E-01	3,10E-01
052. Climate change - Fossil	3,45E-01	4,76E-01	1,00E+00	5,93E-01	4,97E-01	4,12E-01
053. Climate change - Biogenic	1,07E+00	4,76E-01	1,00E+00	5,93E-01	7,71E-01	9,77E-01
054. Climate change - Land use and LU ch	4,61E-01	4,76E-01	1,00E+00	5,93E-01	2,42E-01	4,28E-01
055. Ozone depletion	2,88E-01	4,76E-01	1,00E+00	5,93E-01	2,42E-01	4,48E-01
056. Acidification	2,11E-01	4,76E-01	1,00E+00	5,93E-01	2,99E-01	1,79E-01
057. Eutrophication, freshwater	2,38E-01	4,76E-01	1,00E+00	5,93E-01	2,47E-01	1,85E-01
058. Eutrophication, marine	2,88E-01	4,76E-01	1,00E+00	5,93E-01	4,03E-01	2,25E-01
059. Eutrophication, terrestrial	2,65E-01	4,76E-01	1,00E+00	5,93E-01	3,92E-01	2,11E-01
060. Photochemical ozone formation	2,63E-01	4,76E-01	1,00E+00	5,93E-01	3,62E-01	2,15E-01
061. Resource use, minerals and metals	3,11E-01	4,76E-01	1,00E+00	5,93E-01	2,88E-01	2,79E-01
062. Resource use, fossils	3,51E-01	4,76E-01	1,00E+00	5,93E-01	2,57E-01	4,63E-01
063. Water use	3,32E-01	4,76E-01	1,00E+00	5,93E-01	1,97E-01	2,49E-01
064. Particulate matter	2,63E-01	4,76E-01	1,00E+00	5,93E-01	3,49E-01	2,15E-01
065. Ionising radiation	3,21E-01	4,76E-01	1,00E+00	5,93E-01	2,32E-01	3,62E-01
066. Ecotoxicity, freshwater	2,28E-01	4,76E-01	1,00E+00	5,93E-01	2,05E-01	1,80E-01
067. Human toxicity, cancer	2,15E-01	4,76E-01	1,00E+00	5,93E-01	2,20E-01	1,85E-01
068. Human toxicity, non-cancer	1,87E-01	4,76E-01	1,00E+00	5,93E-01	3,40E-01	1,72E-01
069. Land use	4,87E-01	4,76E-01	1,00E+00	5,93E-01	3,36E-01	6,99E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	24/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9515						
051. Climate change	3,58E-01	5,31E-01	1,00E+00	5,93E-01	5,48E-01	3,95E-01
052. Climate change - Fossil	3,79E-01	5,31E-01	1,00E+00	5,93E-01	5,48E-01	4,85E-01
053. Climate change - Biogenic	1,07E+00	5,31E-01	1,00E+00	5,93E-01	8,00E-01	9,82E-01
054. Climate change - Land use and LU ch	4,90E-01	5,31E-01	1,00E+00	5,93E-01	3,49E-01	5,00E-01
055. Ozone depletion	3,52E-01	5,31E-01	1,00E+00	5,93E-01	3,53E-01	5,17E-01
056. Acidification	3,12E-01	5,31E-01	1,00E+00	5,93E-01	3,93E-01	3,06E-01
057. Eutrophication, freshwater	3,20E-01	5,31E-01	1,00E+00	5,93E-01	3,51E-01	3,10E-01
058. Eutrophication, marine	3,43E-01	5,31E-01	1,00E+00	5,93E-01	4,75E-01	3,40E-01
059. Eutrophication, terrestrial	3,30E-01	5,31E-01	1,00E+00	5,93E-01	4,67E-01	3,29E-01
060. Photochemical ozone formation	3,31E-01	5,31E-01	1,00E+00	5,93E-01	4,42E-01	3,33E-01
061. Resource use, minerals and metals	3,29E-01	5,31E-01	1,00E+00	5,93E-01	3,99E-01	3,22E-01
062. Resource use, fossils	3,85E-01	5,31E-01	1,00E+00	5,93E-01	3,61E-01	5,28E-01
063. Water use	3,77E-01	5,31E-01	1,00E+00	5,93E-01	3,50E-01	3,55E-01
064. Particulate matter	3,34E-01	5,31E-01	1,00E+00	5,93E-01	4,31E-01	3,34E-01
065. Ionising radiation	3,52E-01	5,31E-01	1,00E+00	5,93E-01	3,39E-01	4,39E-01
066. Ecotoxicity, freshwater	3,13E-01	5,31E-01	1,00E+00	5,93E-01	3,50E-01	3,06E-01
067. Human toxicity, cancer	3,13E-01	5,31E-01	1,00E+00	5,93E-01	3,27E-01	3,08E-01
068. Human toxicity, non-cancer	3,03E-01	5,31E-01	1,00E+00	5,93E-01	4,32E-01	3,00E-01
069. Land use	5,25E-01	5,31E-01	1,00E+00	5,93E-01	4,28E-01	7,43E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	25/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9517						
051. Climate change	3,60E-01	5,31E-01	1,00E+00	5,93E-01	5,49E-01	3,97E-01
052. Climate change - Fossil	3,81E-01	5,31E-01	1,00E+00	5,93E-01	5,48E-01	4,86E-01
053. Climate change - Biogenic	1,07E+00	5,31E-01	1,00E+00	5,93E-01	8,00E-01	9,82E-01
054. Climate change - Land use and LU ch	4,90E-01	5,31E-01	1,00E+00	5,93E-01	3,49E-01	5,00E-01
055. Ozone depletion	3,52E-01	5,31E-01	1,00E+00	5,93E-01	3,53E-01	5,18E-01
056. Acidification	3,13E-01	5,31E-01	1,00E+00	5,93E-01	3,93E-01	3,06E-01
057. Eutrophication, freshwater	3,20E-01	5,31E-01	1,00E+00	5,93E-01	3,51E-01	3,10E-01
058. Eutrophication, marine	3,43E-01	5,31E-01	1,00E+00	5,93E-01	4,74E-01	3,41E-01
059. Eutrophication, terrestrial	3,30E-01	5,31E-01	1,00E+00	5,93E-01	4,65E-01	3,30E-01
060. Photochemical ozone formation	3,31E-01	5,31E-01	1,00E+00	5,93E-01	4,42E-01	3,33E-01
061. Resource use, minerals and metals	3,29E-01	5,31E-01	1,00E+00	5,93E-01	3,98E-01	3,22E-01
062. Resource use, fossils	3,88E-01	5,31E-01	1,00E+00	5,93E-01	3,60E-01	5,29E-01
063. Water use	3,79E-01	5,31E-01	1,00E+00	5,93E-01	3,49E-01	3,56E-01
064. Particulate matter	3,35E-01	5,31E-01	1,00E+00	5,93E-01	4,30E-01	3,34E-01
065. Ionising radiation	3,53E-01	5,31E-01	1,00E+00	5,93E-01	3,39E-01	4,39E-01
066. Ecotoxicity, freshwater	3,13E-01	5,31E-01	1,00E+00	5,93E-01	3,49E-01	3,06E-01
067. Human toxicity, cancer	3,13E-01	5,31E-01	1,00E+00	5,93E-01	3,26E-01	3,08E-01
068. Human toxicity, non-cancer	3,03E-01	5,31E-01	1,00E+00	5,93E-01	4,30E-01	3,00E-01
069. Land use	5,26E-01	5,31E-01	1,00E+00	5,93E-01	4,28E-01	7,43E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	26/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9518						
051. Climate change	3,61E-01	5,57E-01	1,11E+00	5,93E-01	5,47E-01	4,07E-01
052. Climate change - Fossil	3,82E-01	5,57E-01	1,21E+00	5,93E-01	5,45E-01	4,95E-01
053. Climate change - Biogenic	1,08E+00	5,57E-01	1,11E+00	5,93E-01	1,66E+00	9,81E-01
054. Climate change - Land use and LU ch	5,71E-01	5,57E-01	1,26E+00	5,93E-01	3,48E-01	5,67E-01
055. Ozone depletion	3,58E-01	5,57E-01	1,22E+00	5,93E-01	3,52E-01	5,34E-01
056. Acidification	3,13E-01	5,57E-01	1,27E+00	5,93E-01	3,92E-01	3,07E-01
057. Eutrophication, freshwater	3,20E-01	5,57E-01	1,30E+00	5,93E-01	3,50E-01	3,12E-01
058. Eutrophication, marine	3,44E-01	5,57E-01	1,28E+00	5,93E-01	4,72E-01	3,47E-01
059. Eutrophication, terrestrial	3,31E-01	5,57E-01	1,27E+00	5,93E-01	4,64E-01	3,34E-01
060. Photochemical ozone formation	3,32E-01	5,57E-01	1,28E+00	5,93E-01	4,40E-01	3,36E-01
061. Resource use, minerals and metals	3,29E-01	5,57E-01	1,29E+00	5,93E-01	3,98E-01	3,22E-01
062. Resource use, fossils	3,89E-01	5,57E-01	1,23E+00	5,93E-01	3,60E-01	5,39E-01
063. Water use	3,77E-01	5,57E-01	1,34E+00	5,93E-01	3,48E-01	3,63E-01
064. Particulate matter	3,37E-01	5,57E-01	1,26E+00	5,93E-01	4,30E-01	3,41E-01
065. Ionising radiation	3,57E-01	5,57E-01	1,24E+00	5,93E-01	3,38E-01	4,56E-01
066. Ecotoxicity, freshwater	3,14E-01	5,57E-01	1,29E+00	5,93E-01	3,49E-01	3,08E-01
067. Human toxicity, cancer	3,14E-01	5,57E-01	1,30E+00	5,93E-01	3,26E-01	3,09E-01
068. Human toxicity, non-cancer	3,03E-01	5,57E-01	1,26E+00	5,93E-01	4,28E-01	3,00E-01
069. Land use	5,39E-01	5,57E-01	1,15E+00	5,93E-01	4,27E-01	7,65E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	27/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9520						
051. Climate change	4,65E-01	5,67E-01	1,00E+00	8,60E-01	5,86E-01	4,19E-01
052. Climate change - Fossil	4,83E-01	5,67E-01	1,00E+00	8,60E-01	5,86E-01	5,05E-01
053. Climate change - Biogenic	1,05E+00	5,67E-01	1,00E+00	8,60E-01	8,07E-01	9,80E-01
054. Climate change - Land use and LU ch	5,74E-01	5,67E-01	1,00E+00	8,60E-01	3,54E-01	5,17E-01
055. Ozone depletion	4,21E-01	5,67E-01	1,00E+00	8,60E-01	3,51E-01	5,36E-01
056. Acidification	3,34E-01	5,67E-01	1,00E+00	8,60E-01	4,06E-01	2,90E-01
057. Eutrophication, freshwater	3,68E-01	5,67E-01	1,00E+00	8,60E-01	3,59E-01	2,96E-01
058. Eutrophication, marine	4,26E-01	5,67E-01	1,00E+00	8,60E-01	5,00E-01	3,33E-01
059. Eutrophication, terrestrial	4,01E-01	5,67E-01	1,00E+00	8,60E-01	4,90E-01	3,20E-01
060. Photochemical ozone formation	3,97E-01	5,67E-01	1,00E+00	8,60E-01	4,63E-01	3,24E-01
061. Resource use, minerals and metals	4,70E-01	5,67E-01	1,00E+00	8,60E-01	3,89E-01	4,27E-01
062. Resource use, fossils	4,90E-01	5,67E-01	1,00E+00	8,60E-01	3,67E-01	5,50E-01
063. Water use	4,66E-01	5,67E-01	1,00E+00	8,60E-01	2,94E-01	3,58E-01
064. Particulate matter	3,95E-01	5,67E-01	1,00E+00	8,60E-01	4,54E-01	3,22E-01
065. Ionising radiation	4,68E-01	5,67E-01	1,00E+00	8,60E-01	3,46E-01	4,65E-01
066. Ecotoxicity, freshwater	3,57E-01	5,67E-01	1,00E+00	8,60E-01	3,03E-01	2,92E-01
067. Human toxicity, cancer	3,38E-01	5,67E-01	1,00E+00	8,60E-01	3,36E-01	2,97E-01
068. Human toxicity, non-cancer	3,04E-01	5,67E-01	1,00E+00	8,60E-01	4,40E-01	2,84E-01
069. Land use	5,86E-01	5,67E-01	1,00E+00	8,60E-01	4,37E-01	7,42E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	28/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9522						
051. Climate change	4,67E-01	5,67E-01	1,00E+00	8,60E-01	5,86E-01	4,21E-01
052. Climate change - Fossil	4,85E-01	5,67E-01	1,00E+00	8,60E-01	5,86E-01	5,06E-01
053. Climate change - Biogenic	1,05E+00	5,67E-01	1,00E+00	8,60E-01	8,07E-01	9,80E-01
054. Climate change - Land use and LU ch	5,74E-01	5,67E-01	1,00E+00	8,60E-01	3,54E-01	5,18E-01
055. Ozone depletion	4,21E-01	5,67E-01	1,00E+00	8,60E-01	3,51E-01	5,37E-01
056. Acidification	3,34E-01	5,67E-01	1,00E+00	8,60E-01	4,05E-01	2,90E-01
057. Eutrophication, freshwater	3,68E-01	5,67E-01	1,00E+00	8,60E-01	3,59E-01	2,96E-01
058. Eutrophication, marine	4,26E-01	5,67E-01	1,00E+00	8,60E-01	4,98E-01	3,34E-01
059. Eutrophication, terrestrial	4,01E-01	5,67E-01	1,00E+00	8,60E-01	4,89E-01	3,20E-01
060. Photochemical ozone formation	3,97E-01	5,67E-01	1,00E+00	8,60E-01	4,62E-01	3,24E-01
061. Resource use, minerals and metals	4,70E-01	5,67E-01	1,00E+00	8,60E-01	3,89E-01	4,27E-01
062. Resource use, fossils	4,93E-01	5,67E-01	1,00E+00	8,60E-01	3,67E-01	5,51E-01
063. Water use	4,68E-01	5,67E-01	1,00E+00	8,60E-01	2,93E-01	3,59E-01
064. Particulate matter	3,95E-01	5,67E-01	1,00E+00	8,60E-01	4,53E-01	3,22E-01
065. Ionising radiation	4,69E-01	5,67E-01	1,00E+00	8,60E-01	3,45E-01	4,66E-01
066. Ecotoxicity, freshwater	3,58E-01	5,67E-01	1,00E+00	8,60E-01	3,02E-01	2,92E-01
067. Human toxicity, cancer	3,38E-01	5,67E-01	1,00E+00	8,60E-01	3,36E-01	2,97E-01
068. Human toxicity, non-cancer	3,04E-01	5,67E-01	1,00E+00	8,60E-01	4,38E-01	2,84E-01
069. Land use	5,87E-01	5,67E-01	1,00E+00	8,60E-01	4,36E-01	7,42E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	29/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9524						
051. Climate change	4,68E-01	5,94E-01	1,11E+00	8,60E-01	5,85E-01	4,32E-01
052. Climate change - Fossil	4,86E-01	5,94E-01	1,21E+00	8,60E-01	5,83E-01	5,15E-01
053. Climate change - Biogenic	1,06E+00	5,94E-01	1,11E+00	8,60E-01	1,66E+00	9,79E-01
054. Climate change - Land use and LU ch	6,56E-01	5,94E-01	1,26E+00	8,60E-01	3,54E-01	5,85E-01
055. Ozone depletion	4,27E-01	5,94E-01	1,22E+00	8,60E-01	3,50E-01	5,54E-01
056. Acidification	3,34E-01	5,94E-01	1,27E+00	8,60E-01	4,05E-01	2,91E-01
057. Eutrophication, freshwater	3,69E-01	5,94E-01	1,30E+00	8,60E-01	3,59E-01	2,97E-01
058. Eutrophication, marine	4,27E-01	5,94E-01	1,28E+00	8,60E-01	4,97E-01	3,40E-01
059. Eutrophication, terrestrial	4,02E-01	5,94E-01	1,27E+00	8,60E-01	4,87E-01	3,24E-01
060. Photochemical ozone formation	3,98E-01	5,94E-01	1,28E+00	8,60E-01	4,61E-01	3,28E-01
061. Resource use, minerals and metals	4,70E-01	5,94E-01	1,29E+00	8,60E-01	3,89E-01	4,27E-01
062. Resource use, fossils	4,94E-01	5,94E-01	1,23E+00	8,60E-01	3,67E-01	5,61E-01
063. Water use	4,67E-01	5,94E-01	1,34E+00	8,60E-01	2,92E-01	3,66E-01
064. Particulate matter	3,97E-01	5,94E-01	1,26E+00	8,60E-01	4,53E-01	3,29E-01
065. Ionising radiation	4,73E-01	5,94E-01	1,24E+00	8,60E-01	3,45E-01	4,82E-01
066. Ecotoxicity, freshwater	3,59E-01	5,94E-01	1,29E+00	8,60E-01	3,02E-01	2,94E-01
067. Human toxicity, cancer	3,40E-01	5,94E-01	1,30E+00	8,60E-01	3,35E-01	2,98E-01
068. Human toxicity, non-cancer	3,04E-01	5,94E-01	1,26E+00	8,60E-01	4,36E-01	2,84E-01
069. Land use	6,00E-01	5,94E-01	1,15E+00	8,60E-01	4,35E-01	7,63E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	30/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9525						
051. Climate change	5,01E-01	6,22E-01	1,00E+00	8,60E-01	6,37E-01	5,05E-01
052. Climate change - Fossil	5,18E-01	6,22E-01	1,00E+00	8,60E-01	6,37E-01	5,78E-01
053. Climate change - Biogenic	1,05E+00	6,22E-01	1,00E+00	8,60E-01	8,37E-01	9,84E-01
054. Climate change - Land use and LU ch	6,03E-01	6,22E-01	1,00E+00	8,60E-01	4,61E-01	5,90E-01
055. Ozone depletion	4,85E-01	6,22E-01	1,00E+00	8,60E-01	4,62E-01	6,05E-01
056. Acidification	4,35E-01	6,22E-01	1,00E+00	8,60E-01	5,00E-01	4,17E-01
057. Eutrophication, freshwater	4,50E-01	6,22E-01	1,00E+00	8,60E-01	4,64E-01	4,21E-01
058. Eutrophication, marine	4,80E-01	6,22E-01	1,00E+00	8,60E-01	5,72E-01	4,49E-01
059. Eutrophication, terrestrial	4,65E-01	6,22E-01	1,00E+00	8,60E-01	5,65E-01	4,39E-01
060. Photochemical ozone formation	4,65E-01	6,22E-01	1,00E+00	8,60E-01	5,44E-01	4,42E-01
061. Resource use, minerals and metals	4,88E-01	6,22E-01	1,00E+00	8,60E-01	5,00E-01	4,70E-01
062. Resource use, fossils	5,23E-01	6,22E-01	1,00E+00	8,60E-01	4,71E-01	6,15E-01
063. Water use	5,11E-01	6,22E-01	1,00E+00	8,60E-01	4,47E-01	4,64E-01
064. Particulate matter	4,66E-01	6,22E-01	1,00E+00	8,60E-01	5,35E-01	4,42E-01
065. Ionising radiation	4,99E-01	6,22E-01	1,00E+00	8,60E-01	4,53E-01	5,42E-01
066. Ecotoxicity, freshwater	4,43E-01	6,22E-01	1,00E+00	8,60E-01	4,49E-01	4,17E-01
067. Human toxicity, cancer	4,36E-01	6,22E-01	1,00E+00	8,60E-01	4,43E-01	4,20E-01
068. Human toxicity, non-cancer	4,20E-01	6,22E-01	1,00E+00	8,60E-01	5,32E-01	4,12E-01
069. Land use	6,25E-01	6,22E-01	1,00E+00	8,60E-01	5,29E-01	7,86E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	31/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9526						
051. Climate change	5,03E-01	6,22E-01	1,00E+00	8,60E-01	6,38E-01	5,06E-01
052. Climate change - Fossil	5,20E-01	6,22E-01	1,00E+00	8,60E-01	6,37E-01	5,79E-01
053. Climate change - Biogenic	1,05E+00	6,22E-01	1,00E+00	8,60E-01	8,36E-01	9,84E-01
054. Climate change - Land use and LU ch	6,04E-01	6,22E-01	1,00E+00	8,60E-01	4,61E-01	5,90E-01
055. Ozone depletion	4,85E-01	6,22E-01	1,00E+00	8,60E-01	4,62E-01	6,06E-01
056. Acidification	4,35E-01	6,22E-01	1,00E+00	8,60E-01	4,99E-01	4,17E-01
057. Eutrophication, freshwater	4,50E-01	6,22E-01	1,00E+00	8,60E-01	4,63E-01	4,21E-01
058. Eutrophication, marine	4,81E-01	6,22E-01	1,00E+00	8,60E-01	5,71E-01	4,49E-01
059. Eutrophication, terrestrial	4,66E-01	6,22E-01	1,00E+00	8,60E-01	5,63E-01	4,39E-01
060. Photochemical ozone formation	4,65E-01	6,22E-01	1,00E+00	8,60E-01	5,43E-01	4,42E-01
061. Resource use, minerals and metals	4,88E-01	6,22E-01	1,00E+00	8,60E-01	4,99E-01	4,70E-01
062. Resource use, fossils	5,26E-01	6,22E-01	1,00E+00	8,60E-01	4,71E-01	6,16E-01
063. Water use	5,13E-01	6,22E-01	1,00E+00	8,60E-01	4,46E-01	4,65E-01
064. Particulate matter	4,67E-01	6,22E-01	1,00E+00	8,60E-01	5,34E-01	4,42E-01
065. Ionising radiation	5,00E-01	6,22E-01	1,00E+00	8,60E-01	4,52E-01	5,42E-01
066. Ecotoxicity, freshwater	4,43E-01	6,22E-01	1,00E+00	8,60E-01	4,48E-01	4,17E-01
067. Human toxicity, cancer	4,37E-01	6,22E-01	1,00E+00	8,60E-01	4,42E-01	4,21E-01
068. Human toxicity, non-cancer	4,20E-01	6,22E-01	1,00E+00	8,60E-01	5,30E-01	4,12E-01
069. Land use	6,25E-01	6,22E-01	1,00E+00	8,60E-01	5,28E-01	7,86E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	32/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9528						
051. Climate change	5,04E-01	6,49E-01	1,11E+00	8,60E-01	6,36E-01	5,17E-01
052. Climate change - Fossil	5,21E-01	6,49E-01	1,21E+00	8,60E-01	6,34E-01	5,88E-01
053. Climate change - Biogenic	1,06E+00	6,49E-01	1,11E+00	8,60E-01	1,69E+00	9,83E-01
054. Climate change - Land use and LU ch	6,85E-01	6,49E-01	1,26E+00	8,60E-01	4,60E-01	6,57E-01
055. Ozone depletion	4,91E-01	6,49E-01	1,22E+00	8,60E-01	4,62E-01	6,23E-01
056. Acidification	4,35E-01	6,49E-01	1,27E+00	8,60E-01	4,99E-01	4,18E-01
057. Eutrophication, freshwater	4,50E-01	6,49E-01	1,30E+00	8,60E-01	4,63E-01	4,22E-01
058. Eutrophication, marine	4,81E-01	6,49E-01	1,28E+00	8,60E-01	5,69E-01	4,55E-01
059. Eutrophication, terrestrial	4,67E-01	6,49E-01	1,27E+00	8,60E-01	5,62E-01	4,43E-01
060. Photochemical ozone formation	4,66E-01	6,49E-01	1,28E+00	8,60E-01	5,42E-01	4,45E-01
061. Resource use, minerals and metals	4,88E-01	6,49E-01	1,29E+00	8,60E-01	4,99E-01	4,70E-01
062. Resource use, fossils	5,27E-01	6,49E-01	1,23E+00	8,60E-01	4,70E-01	6,26E-01
063. Water use	5,11E-01	6,49E-01	1,34E+00	8,60E-01	4,45E-01	4,72E-01
064. Particulate matter	4,69E-01	6,49E-01	1,26E+00	8,60E-01	5,34E-01	4,48E-01
065. Ionising radiation	5,04E-01	6,49E-01	1,24E+00	8,60E-01	4,52E-01	5,59E-01
066. Ecotoxicity, freshwater	4,44E-01	6,49E-01	1,29E+00	8,60E-01	4,47E-01	4,20E-01
067. Human toxicity, cancer	4,38E-01	6,49E-01	1,30E+00	8,60E-01	4,42E-01	4,21E-01
068. Human toxicity, non-cancer	4,20E-01	6,49E-01	1,26E+00	8,60E-01	5,28E-01	4,12E-01
069. Land use	6,38E-01	6,49E-01	1,15E+00	8,60E-01	5,27E-01	8,07E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	33/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9530						
051. Climate change	6,21E-01	6,77E-01	1,00E+00	7,32E-01	6,92E-01	5,59E-01
052. Climate change - Fossil	6,34E-01	6,77E-01	1,00E+00	7,32E-01	6,92E-01	6,24E-01
053. Climate change - Biogenic	1,03E+00	6,77E-01	1,00E+00	7,32E-01	8,53E-01	9,83E-01
054. Climate change - Land use and LU ch	6,98E-01	6,77E-01	1,00E+00	7,32E-01	5,03E-01	6,33E-01
055. Ozone depletion	5,74E-01	6,77E-01	1,00E+00	7,32E-01	4,98E-01	6,48E-01
056. Acidification	4,92E-01	6,77E-01	1,00E+00	7,32E-01	5,45E-01	4,48E-01
057. Eutrophication, freshwater	5,28E-01	6,77E-01	1,00E+00	7,32E-01	5,08E-01	4,52E-01
058. Eutrophication, marine	5,83E-01	6,77E-01	1,00E+00	7,32E-01	6,21E-01	4,84E-01
059. Eutrophication, terrestrial	5,60E-01	6,77E-01	1,00E+00	7,32E-01	6,13E-01	4,72E-01
060. Photochemical ozone formation	5,55E-01	6,77E-01	1,00E+00	7,32E-01	5,91E-01	4,76E-01
061. Resource use, minerals and metals	6,36E-01	6,77E-01	1,00E+00	7,32E-01	5,24E-01	5,91E-01
062. Resource use, fossils	6,39E-01	6,77E-01	1,00E+00	7,32E-01	5,14E-01	6,60E-01
063. Water use	6,16E-01	6,77E-01	1,00E+00	7,32E-01	4,34E-01	5,06E-01
064. Particulate matter	5,52E-01	6,77E-01	1,00E+00	7,32E-01	5,85E-01	4,73E-01
065. Ionising radiation	6,26E-01	6,77E-01	1,00E+00	7,32E-01	4,97E-01	5,95E-01
066. Ecotoxicity, freshwater	5,18E-01	6,77E-01	1,00E+00	7,32E-01	4,45E-01	4,49E-01
067. Human toxicity, cancer	4,97E-01	6,77E-01	1,00E+00	7,32E-01	4,91E-01	4,55E-01
068. Human toxicity, non-cancer	4,64E-01	6,77E-01	1,00E+00	7,32E-01	5,69E-01	4,43E-01
069. Land use	7,00E-01	6,77E-01	1,00E+00	7,32E-01	5,67E-01	8,00E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	34/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9535						
051. Climate change	6,57E-01	7,32E-01	1,00E+00	7,32E-01	7,43E-01	6,45E-01
052. Climate change - Fossil	6,68E-01	7,32E-01	1,00E+00	7,32E-01	7,43E-01	6,97E-01
053. Climate change - Biogenic	1,03E+00	7,32E-01	1,00E+00	7,32E-01	8,83E-01	9,88E-01
054. Climate change - Land use and LU ch	7,27E-01	7,32E-01	1,00E+00	7,32E-01	6,10E-01	7,05E-01
055. Ozone depletion	6,38E-01	7,32E-01	1,00E+00	7,32E-01	6,09E-01	7,17E-01
056. Acidification	5,94E-01	7,32E-01	1,00E+00	7,32E-01	6,39E-01	5,74E-01
057. Eutrophication, freshwater	6,09E-01	7,32E-01	1,00E+00	7,32E-01	6,12E-01	5,77E-01
058. Eutrophication, marine	6,38E-01	7,32E-01	1,00E+00	7,32E-01	6,94E-01	5,99E-01
059. Eutrophication, terrestrial	6,25E-01	7,32E-01	1,00E+00	7,32E-01	6,88E-01	5,91E-01
060. Photochemical ozone formation	6,23E-01	7,32E-01	1,00E+00	7,32E-01	6,72E-01	5,93E-01
061. Resource use, minerals and metals	6,53E-01	7,32E-01	1,00E+00	7,32E-01	6,34E-01	6,34E-01
062. Resource use, fossils	6,72E-01	7,32E-01	1,00E+00	7,32E-01	6,17E-01	7,24E-01
063. Water use	6,61E-01	7,32E-01	1,00E+00	7,32E-01	5,87E-01	6,12E-01
064. Particulate matter	6,23E-01	7,32E-01	1,00E+00	7,32E-01	6,66E-01	5,93E-01
065. Ionising radiation	6,57E-01	7,32E-01	1,00E+00	7,32E-01	6,04E-01	6,72E-01
066. Ecotoxicity, freshwater	6,04E-01	7,32E-01	1,00E+00	7,32E-01	5,90E-01	5,75E-01
067. Human toxicity, cancer	5,96E-01	7,32E-01	1,00E+00	7,32E-01	5,97E-01	5,78E-01
068. Human toxicity, non-cancer	5,80E-01	7,32E-01	1,00E+00	7,32E-01	6,61E-01	5,71E-01
069. Land use	7,39E-01	7,32E-01	1,00E+00	7,32E-01	6,59E-01	8,44E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	35/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9536						
051. Climate change	6,59E-01	7,32E-01	1,00E+00	7,32E-01	7,44E-01	6,46E-01
052. Climate change - Fossil	6,70E-01	7,32E-01	1,00E+00	7,32E-01	7,43E-01	6,99E-01
053. Climate change - Biogenic	1,03E+00	7,32E-01	1,00E+00	7,32E-01	8,82E-01	9,88E-01
054. Climate change - Land use and LU ch	7,27E-01	7,32E-01	1,00E+00	7,32E-01	6,09E-01	7,06E-01
055. Ozone depletion	6,38E-01	7,32E-01	1,00E+00	7,32E-01	6,09E-01	7,18E-01
056. Acidification	5,94E-01	7,32E-01	1,00E+00	7,32E-01	6,39E-01	5,74E-01
057. Eutrophication, freshwater	6,09E-01	7,32E-01	1,00E+00	7,32E-01	6,12E-01	5,78E-01
058. Eutrophication, marine	6,38E-01	7,32E-01	1,00E+00	7,32E-01	6,92E-01	5,99E-01
059. Eutrophication, terrestrial	6,25E-01	7,32E-01	1,00E+00	7,32E-01	6,87E-01	5,91E-01
060. Photochemical ozone formation	6,24E-01	7,32E-01	1,00E+00	7,32E-01	6,71E-01	5,94E-01
061. Resource use, minerals and metals	6,53E-01	7,32E-01	1,00E+00	7,32E-01	6,34E-01	6,34E-01
062. Resource use, fossils	6,75E-01	7,32E-01	1,00E+00	7,32E-01	6,17E-01	7,26E-01
063. Water use	6,63E-01	7,32E-01	1,00E+00	7,32E-01	5,85E-01	6,12E-01
064. Particulate matter	6,24E-01	7,32E-01	1,00E+00	7,32E-01	6,66E-01	5,93E-01
065. Ionising radiation	6,57E-01	7,32E-01	1,00E+00	7,32E-01	6,04E-01	6,73E-01
066. Ecotoxicity, freshwater	6,04E-01	7,32E-01	1,00E+00	7,32E-01	5,89E-01	5,75E-01
067. Human toxicity, cancer	5,96E-01	7,32E-01	1,00E+00	7,32E-01	5,97E-01	5,78E-01
068. Human toxicity, non-cancer	5,80E-01	7,32E-01	1,00E+00	7,32E-01	6,59E-01	5,71E-01
069. Land use	7,39E-01	7,32E-01	1,00E+00	7,32E-01	6,59E-01	8,44E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	36/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9537						
051. Climate change	9,03E-01	8,51E-01	1,00E+00	1,00E+00	8,61E-01	7,66E-01
052. Climate change - Fossil	9,06E-01	8,51E-01	1,00E+00	1,00E+00	8,61E-01	8,00E-01
053. Climate change - Biogenic	9,99E-01	8,51E-01	1,00E+00	1,00E+00	9,21E-01	9,87E-01
054. Climate change - Land use and LU ch	9,20E-01	8,51E-01	1,00E+00	1,00E+00	7,10E-01	8,02E-01
055. Ozone depletion	8,27E-01	8,51E-01	1,00E+00	1,00E+00	6,98E-01	8,13E-01
056. Acidification	7,22E-01	8,51E-01	1,00E+00	1,00E+00	7,43E-01	6,52E-01
057. Eutrophication, freshwater	7,76E-01	8,51E-01	1,00E+00	1,00E+00	7,16E-01	6,56E-01
058. Eutrophication, marine	8,50E-01	8,51E-01	1,00E+00	1,00E+00	8,03E-01	6,83E-01
059. Eutrophication, terrestrial	8,22E-01	8,51E-01	1,00E+00	1,00E+00	7,96E-01	6,74E-01
060. Photochemical ozone formation	8,13E-01	8,51E-01	1,00E+00	1,00E+00	7,80E-01	6,77E-01
061. Resource use, minerals and metals	9,52E-01	8,51E-01	1,00E+00	1,00E+00	7,03E-01	8,82E-01
062. Resource use, fossils	9,10E-01	8,51E-01	1,00E+00	1,00E+00	7,17E-01	8,24E-01
063. Water use	8,78E-01	8,51E-01	1,00E+00	1,00E+00	5,93E-01	7,08E-01
064. Particulate matter	8,04E-01	8,51E-01	1,00E+00	1,00E+00	7,79E-01	6,72E-01
065. Ionising radiation	9,15E-01	8,51E-01	1,00E+00	1,00E+00	7,08E-01	7,89E-01
066. Ecotoxicity, freshwater	7,66E-01	8,51E-01	1,00E+00	1,00E+00	6,11E-01	6,55E-01
067. Human toxicity, cancer	7,30E-01	8,51E-01	1,00E+00	1,00E+00	7,07E-01	6,62E-01
068. Human toxicity, non-cancer	6,82E-01	8,51E-01	1,00E+00	1,00E+00	7,51E-01	6,49E-01
069. Land use	8,94E-01	8,51E-01	1,00E+00	1,00E+00	7,50E-01	8,79E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	37/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9538						
051. Climate change	9,53E-01	9,28E-01	1,00E+00	1,00E+00	9,33E-01	8,88E-01
052. Climate change - Fossil	9,55E-01	9,28E-01	1,00E+00	1,00E+00	9,33E-01	9,04E-01
053. Climate change - Biogenic	1,00E+00	9,28E-01	1,00E+00	1,00E+00	9,62E-01	9,94E-01
054. Climate change - Land use and LU ch	9,62E-01	9,28E-01	1,00E+00	1,00E+00	8,61E-01	9,06E-01
055. Ozone depletion	9,16E-01	9,28E-01	1,00E+00	1,00E+00	8,55E-01	9,10E-01
056. Acidification	8,68E-01	9,28E-01	1,00E+00	1,00E+00	8,77E-01	8,35E-01
057. Eutrophication, freshwater	8,93E-01	9,28E-01	1,00E+00	1,00E+00	8,64E-01	8,37E-01
058. Eutrophication, marine	9,29E-01	9,28E-01	1,00E+00	1,00E+00	9,05E-01	8,50E-01
059. Eutrophication, terrestrial	9,15E-01	9,28E-01	1,00E+00	1,00E+00	9,02E-01	8,45E-01
060. Photochemical ozone formation	9,11E-01	9,28E-01	1,00E+00	1,00E+00	8,95E-01	8,46E-01
061. Resource use, minerals and metals	9,77E-01	9,28E-01	1,00E+00	1,00E+00	8,56E-01	9,44E-01
062. Resource use, fossils	9,57E-01	9,28E-01	1,00E+00	1,00E+00	8,65E-01	9,16E-01
063. Water use	9,42E-01	9,28E-01	1,00E+00	1,00E+00	8,00E-01	8,61E-01
064. Particulate matter	9,07E-01	9,28E-01	1,00E+00	1,00E+00	8,94E-01	8,44E-01
065. Ionising radiation	9,59E-01	9,28E-01	1,00E+00	1,00E+00	8,60E-01	9,00E-01
066. Ecotoxicity, freshwater	8,89E-01	9,28E-01	1,00E+00	1,00E+00	8,10E-01	8,36E-01
067. Human toxicity, cancer	8,72E-01	9,28E-01	1,00E+00	1,00E+00	8,61E-01	8,39E-01
068. Human toxicity, non-cancer	8,49E-01	9,28E-01	1,00E+00	1,00E+00	8,80E-01	8,33E-01
069. Land use	9,49E-01	9,28E-01	1,00E+00	1,00E+00	8,80E-01	9,42E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	38/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9540						
051. Climate change	9,08E-01	8,60E-01	1,00E+00	1,00E+00	8,70E-01	7,79E-01
052. Climate change - Fossil	9,11E-01	8,60E-01	1,00E+00	1,00E+00	8,70E-01	8,11E-01
053. Climate change - Biogenic	9,98E-01	8,60E-01	1,00E+00	1,00E+00	9,27E-01	9,88E-01
054. Climate change - Land use and LU ch	9,25E-01	8,60E-01	1,00E+00	1,00E+00	7,27E-01	8,12E-01
055. Ozone depletion	8,40E-01	8,60E-01	1,00E+00	1,00E+00	7,16E-01	8,24E-01
056. Acidification	7,37E-01	8,60E-01	1,00E+00	1,00E+00	7,59E-01	6,70E-01
057. Eutrophication, freshwater	7,87E-01	8,60E-01	1,00E+00	1,00E+00	7,33E-01	6,74E-01
058. Eutrophication, marine	8,58E-01	8,60E-01	1,00E+00	1,00E+00	8,15E-01	7,00E-01
059. Eutrophication, terrestrial	8,31E-01	8,60E-01	1,00E+00	1,00E+00	8,09E-01	6,91E-01
060. Photochemical ozone formation	8,23E-01	8,60E-01	1,00E+00	1,00E+00	7,94E-01	6,94E-01
061. Resource use, minerals and metals	9,54E-01	8,60E-01	1,00E+00	1,00E+00	7,26E-01	8,88E-01
062. Resource use, fossils	9,16E-01	8,60E-01	1,00E+00	1,00E+00	7,34E-01	8,34E-01
063. Water use	8,85E-01	8,60E-01	1,00E+00	1,00E+00	6,27E-01	7,24E-01
064. Particulate matter	8,15E-01	8,60E-01	1,00E+00	1,00E+00	7,94E-01	6,89E-01
065. Ionising radiation	9,20E-01	8,60E-01	1,00E+00	1,00E+00	7,25E-01	8,01E-01
066. Ecotoxicity, freshwater	7,78E-01	8,60E-01	1,00E+00	1,00E+00	6,42E-01	6,73E-01
067. Human toxicity, cancer	7,44E-01	8,60E-01	1,00E+00	1,00E+00	7,22E-01	6,79E-01
068. Human toxicity, non-cancer	6,98E-01	8,60E-01	1,00E+00	1,00E+00	7,69E-01	6,67E-01
069. Land use	8,99E-01	8,60E-01	1,00E+00	1,00E+00	7,67E-01	8,85E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	39/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9545						
051. Climate change	9,44E-01	9,15E-01	1,00E+00	1,00E+00	9,21E-01	8,65E-01
052. Climate change - Fossil	9,46E-01	9,15E-01	1,00E+00	1,00E+00	9,21E-01	8,84E-01
053. Climate change - Biogenic	9,99E-01	9,15E-01	1,00E+00	1,00E+00	9,56E-01	9,93E-01
054. Climate change - Land use and LU ch	9,54E-01	9,15E-01	1,00E+00	1,00E+00	8,34E-01	8,84E-01
055. Ozone depletion	9,04E-01	9,15E-01	1,00E+00	1,00E+00	8,27E-01	8,93E-01
056. Acidification	8,38E-01	9,15E-01	1,00E+00	1,00E+00	8,53E-01	7,97E-01
057. Eutrophication, freshwater	8,69E-01	9,15E-01	1,00E+00	1,00E+00	8,38E-01	7,99E-01
058. Eutrophication, marine	9,13E-01	9,15E-01	1,00E+00	1,00E+00	8,88E-01	8,15E-01
059. Eutrophication, terrestrial	8,96E-01	9,15E-01	1,00E+00	1,00E+00	8,84E-01	8,09E-01
060. Photochemical ozone formation	8,91E-01	9,15E-01	1,00E+00	1,00E+00	8,74E-01	8,11E-01
061. Resource use, minerals and metals	9,72E-01	9,15E-01	1,00E+00	1,00E+00	8,36E-01	9,31E-01
062. Resource use, fossils	9,49E-01	9,15E-01	1,00E+00	1,00E+00	8,38E-01	8,99E-01
063. Water use	9,29E-01	9,15E-01	1,00E+00	1,00E+00	7,80E-01	8,30E-01
064. Particulate matter	8,86E-01	9,15E-01	1,00E+00	1,00E+00	8,75E-01	8,08E-01
065. Ionising radiation	9,51E-01	9,15E-01	1,00E+00	1,00E+00	8,31E-01	8,78E-01
066. Ecotoxicity, freshwater	8,63E-01	9,15E-01	1,00E+00	1,00E+00	7,88E-01	7,98E-01
067. Human toxicity, cancer	8,42E-01	9,15E-01	1,00E+00	1,00E+00	8,29E-01	8,02E-01
068. Human toxicity, non-cancer	8,14E-01	9,15E-01	1,00E+00	1,00E+00	8,61E-01	7,95E-01
069. Land use	9,38E-01	9,15E-01	1,00E+00	1,00E+00	8,59E-01	9,29E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	40/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9560						
051. Climate change	6,12E-01	6,63E-01	1,00E+00	7,32E-01	6,79E-01	5,38E-01
052. Climate change - Fossil	6,25E-01	6,63E-01	1,00E+00	7,32E-01	6,79E-01	6,06E-01
053. Climate change - Biogenic	1,03E+00	6,63E-01	1,00E+00	7,32E-01	8,46E-01	9,82E-01
054. Climate change - Land use and LU ch	6,91E-01	6,63E-01	1,00E+00	7,32E-01	4,76E-01	6,15E-01
055. Ozone depletion	5,57E-01	6,63E-01	1,00E+00	7,32E-01	4,70E-01	6,30E-01
056. Acidification	4,67E-01	6,63E-01	1,00E+00	7,32E-01	5,21E-01	4,16E-01
057. Eutrophication, freshwater	5,07E-01	6,63E-01	1,00E+00	7,32E-01	4,81E-01	4,21E-01
058. Eutrophication, marine	5,69E-01	6,63E-01	1,00E+00	7,32E-01	6,03E-01	4,54E-01
059. Eutrophication, terrestrial	5,43E-01	6,63E-01	1,00E+00	7,32E-01	5,94E-01	4,42E-01
060. Photochemical ozone formation	5,38E-01	6,63E-01	1,00E+00	7,32E-01	5,71E-01	4,46E-01
061. Resource use, minerals and metals	6,31E-01	6,63E-01	1,00E+00	7,32E-01	4,96E-01	5,80E-01
062. Resource use, fossils	6,31E-01	6,63E-01	1,00E+00	7,32E-01	4,87E-01	6,44E-01
063. Water use	6,05E-01	6,63E-01	1,00E+00	7,32E-01	3,95E-01	4,79E-01
064. Particulate matter	5,34E-01	6,63E-01	1,00E+00	7,32E-01	5,64E-01	4,43E-01
065. Ionising radiation	6,18E-01	6,63E-01	1,00E+00	7,32E-01	4,70E-01	5,76E-01
066. Ecotoxicity, freshwater	4,97E-01	6,63E-01	1,00E+00	7,32E-01	4,08E-01	4,18E-01
067. Human toxicity, cancer	4,73E-01	6,63E-01	1,00E+00	7,32E-01	4,64E-01	4,24E-01
068. Human toxicity, non-cancer	4,35E-01	6,63E-01	1,00E+00	7,32E-01	5,46E-01	4,10E-01
069. Land use	6,90E-01	6,63E-01	1,00E+00	7,32E-01	5,43E-01	7,89E-01

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	41/60

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9565						
051. Climate change	6,60E-01	7,37E-01	1,00E+00	7,32E-01	7,47E-01	6,52E-01
052. Climate change - Fossil	6,71E-01	7,37E-01	1,00E+00	7,32E-01	7,47E-01	7,03E-01
053. Climate change - Biogenic	1,03E+00	7,37E-01	1,00E+00	7,32E-01	8,85E-01	9,88E-01
054. Climate change - Land use and LU ch	7,29E-01	7,37E-01	1,00E+00	7,32E-01	6,18E-01	7,11E-01
055. Ozone depletion	6,43E-01	7,37E-01	1,00E+00	7,32E-01	6,18E-01	7,22E-01
056. Acidification	6,02E-01	7,37E-01	1,00E+00	7,32E-01	6,47E-01	5,85E-01
057. Eutrophication, freshwater	6,16E-01	7,37E-01	1,00E+00	7,32E-01	6,20E-01	5,87E-01
058. Eutrophication, marine	6,42E-01	7,37E-01	1,00E+00	7,32E-01	7,00E-01	6,08E-01
059. Eutrophication, terrestrial	6,30E-01	7,37E-01	1,00E+00	7,32E-01	6,94E-01	6,01E-01
060. Photochemical ozone formation	6,29E-01	7,37E-01	1,00E+00	7,32E-01	6,79E-01	6,03E-01
061. Resource use, minerals and metals	6,55E-01	7,37E-01	1,00E+00	7,32E-01	6,43E-01	6,38E-01
062. Resource use, fossils	6,75E-01	7,37E-01	1,00E+00	7,32E-01	6,25E-01	7,29E-01
063. Water use	6,65E-01	7,37E-01	1,00E+00	7,32E-01	5,99E-01	6,21E-01
064. Particulate matter	6,29E-01	7,37E-01	1,00E+00	7,32E-01	6,73E-01	6,03E-01
065. Ionising radiation	6,60E-01	7,37E-01	1,00E+00	7,32E-01	6,12E-01	6,78E-01
066. Ecotoxicity, freshwater	6,10E-01	7,37E-01	1,00E+00	7,32E-01	6,02E-01	5,85E-01
067. Human toxicity, cancer	6,04E-01	7,37E-01	1,00E+00	7,32E-01	6,06E-01	5,88E-01
068. Human toxicity, non-cancer	5,89E-01	7,37E-01	1,00E+00	7,32E-01	6,68E-01	5,81E-01
069. Land use	7,42E-01	7,37E-01	1,00E+00	7,32E-01	6,66E-01	8,48E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	42/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9580						
051. Climate change	8,99E-01	8,46E-01	1,00E+00	1,00E+00	8,57E-01	7,57E-01
052. Climate change - Fossil	9,02E-01	8,46E-01	1,00E+00	1,00E+00	8,57E-01	7,92E-01
053. Climate change - Biogenic	9,98E-01	8,46E-01	1,00E+00	1,00E+00	9,20E-01	9,87E-01
054. Climate change - Land use and LU ch	9,17E-01	8,46E-01	1,00E+00	1,00E+00	7,00E-01	7,94E-01
055. Ozone depletion	8,24E-01	8,46E-01	1,00E+00	1,00E+00	6,88E-01	8,07E-01
056. Acidification	7,11E-01	8,46E-01	1,00E+00	1,00E+00	7,35E-01	6,38E-01
057. Eutrophication, freshwater	7,67E-01	8,46E-01	1,00E+00	1,00E+00	7,07E-01	6,42E-01
058. Eutrophication, marine	8,45E-01	8,46E-01	1,00E+00	1,00E+00	7,97E-01	6,71E-01
059. Eutrophication, terrestrial	8,15E-01	8,46E-01	1,00E+00	1,00E+00	7,90E-01	6,61E-01
060. Photochemical ozone formation	8,06E-01	8,46E-01	1,00E+00	1,00E+00	7,73E-01	6,64E-01
061. Resource use, minerals and metals	9,50E-01	8,46E-01	1,00E+00	1,00E+00	6,98E-01	8,77E-01
062. Resource use, fossils	9,07E-01	8,46E-01	1,00E+00	1,00E+00	7,08E-01	8,18E-01
063. Water use	8,73E-01	8,46E-01	1,00E+00	1,00E+00	5,89E-01	6,97E-01
064. Particulate matter	7,97E-01	8,46E-01	1,00E+00	1,00E+00	7,73E-01	6,58E-01
065. Ionising radiation	9,12E-01	8,46E-01	1,00E+00	1,00E+00	6,98E-01	7,82E-01
066. Ecotoxicity, freshwater	7,56E-01	8,46E-01	1,00E+00	1,00E+00	6,05E-01	6,41E-01
067. Human toxicity, cancer	7,20E-01	8,46E-01	1,00E+00	1,00E+00	6,95E-01	6,48E-01
068. Human toxicity, non-cancer	6,69E-01	8,46E-01	1,00E+00	1,00E+00	7,45E-01	6,35E-01
069. Land use	8,90E-01	8,46E-01	1,00E+00	1,00E+00	7,44E-01	8,74E-01

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	43/60

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9600						
051. Climate change	2,20E-01	4,06E-01	1,00E+00	3,25E-01	4,29E-01	2,24E-01
052. Climate change - Fossil	2,46E-01	4,06E-01	1,00E+00	3,25E-01	4,29E-01	3,38E-01
053. Climate change - Biogenic	1,08E+00	4,06E-01	1,00E+00	3,25E-01	7,41E-01	9,75E-01
054. Climate change - Land use and LU ch	3,81E-01	4,06E-01	1,00E+00	3,25E-01	1,52E-01	3,58E-01
055. Ozone depletion	1,88E-01	4,06E-01	1,00E+00	3,25E-01	1,52E-01	3,79E-01
056. Acidification	1,15E-01	4,06E-01	1,00E+00	3,25E-01	2,14E-01	8,71E-02
057. Eutrophication, freshwater	1,40E-01	4,06E-01	1,00E+00	3,25E-01	1,55E-01	9,33E-02
058. Eutrophication, marine	1,88E-01	4,06E-01	1,00E+00	3,25E-01	3,27E-01	1,37E-01
059. Eutrophication, terrestrial	1,65E-01	4,06E-01	1,00E+00	3,25E-01	3,14E-01	1,21E-01
060. Photochemical ozone formation	1,64E-01	4,06E-01	1,00E+00	3,25E-01	2,82E-01	1,26E-01
061. Resource use, minerals and metals	2,02E-01	4,06E-01	1,00E+00	3,25E-01	2,03E-01	1,74E-01
062. Resource use, fossils	2,54E-01	4,06E-01	1,00E+00	3,25E-01	1,68E-01	3,95E-01
063. Water use	2,35E-01	4,06E-01	1,00E+00	3,25E-01	1,06E-01	1,61E-01
064. Particulate matter	1,65E-01	4,06E-01	1,00E+00	3,25E-01	2,67E-01	1,26E-01
065. Ionising radiation	2,19E-01	4,06E-01	1,00E+00	3,25E-01	1,40E-01	2,82E-01
066. Ecotoxicity, freshwater	1,29E-01	4,06E-01	1,00E+00	3,25E-01	1,14E-01	8,78E-02
067. Human toxicity, cancer	1,19E-01	4,06E-01	1,00E+00	3,25E-01	1,27E-01	9,27E-02
068. Human toxicity, non-cancer	9,22E-02	4,06E-01	1,00E+00	3,25E-01	2,58E-01	7,90E-02
069. Land use	4,15E-01	4,06E-01	1,00E+00	3,25E-01	2,55E-01	6,64E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	44/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9700						
051. Climate change	3,55E-01	4,84E-01	1,00E+00	6,50E-01	5,05E-01	3,13E-01
052. Climate change - Fossil	3,77E-01	4,84E-01	1,00E+00	6,50E-01	5,04E-01	4,14E-01
053. Climate change - Biogenic	1,06E+00	4,84E-01	1,00E+00	6,50E-01	7,70E-01	9,76E-01
054. Climate change - Land use and LU ch	4,87E-01	4,84E-01	1,00E+00	6,50E-01	2,37E-01	4,31E-01
055. Ozone depletion	3,03E-01	4,84E-01	1,00E+00	6,50E-01	2,33E-01	4,49E-01
056. Acidification	2,14E-01	4,84E-01	1,00E+00	6,50E-01	2,97E-01	1,69E-01
057. Eutrophication, freshwater	2,51E-01	4,84E-01	1,00E+00	6,50E-01	2,42E-01	1,76E-01
058. Eutrophication, marine	3,13E-01	4,84E-01	1,00E+00	6,50E-01	4,05E-01	2,18E-01
059. Eutrophication, terrestrial	2,86E-01	4,84E-01	1,00E+00	6,50E-01	3,93E-01	2,03E-01
060. Photochemical ozone formation	2,82E-01	4,84E-01	1,00E+00	6,50E-01	3,62E-01	2,08E-01
061. Resource use, minerals and metals	3,58E-01	4,84E-01	1,00E+00	6,50E-01	2,72E-01	3,12E-01
062. Resource use, fossils	3,83E-01	4,84E-01	1,00E+00	6,50E-01	2,53E-01	4,67E-01
063. Water use	3,59E-01	4,84E-01	1,00E+00	6,50E-01	1,55E-01	2,46E-01
064. Particulate matter	2,80E-01	4,84E-01	1,00E+00	6,50E-01	3,50E-01	2,06E-01
065. Ionising radiation	3,58E-01	4,84E-01	1,00E+00	6,50E-01	2,28E-01	3,67E-01
066. Ecotoxicity, freshwater	2,39E-01	4,84E-01	1,00E+00	6,50E-01	1,69E-01	1,71E-01
067. Human toxicity, cancer	2,20E-01	4,84E-01	1,00E+00	6,50E-01	2,19E-01	1,77E-01
068. Human toxicity, non-cancer	1,83E-01	4,84E-01	1,00E+00	6,50E-01	3,33E-01	1,62E-01
069. Land use	5,05E-01	4,84E-01	1,00E+00	6,50E-01	3,30E-01	6,97E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	45/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9705						
051. Climate change	4,22E-01	5,86E-01	1,00E+00	6,50E-01	6,01E-01	4,73E-01
052. Climate change - Fossil	4,41E-01	5,86E-01	1,00E+00	6,50E-01	6,00E-01	5,51E-01
053. Climate change - Biogenic	1,06E+00	5,86E-01	1,00E+00	6,50E-01	8,25E-01	9,85E-01
054. Climate change - Land use and LU ch	5,42E-01	5,86E-01	1,00E+00	6,50E-01	4,37E-01	5,66E-01
055. Ozone depletion	4,24E-01	5,86E-01	1,00E+00	6,50E-01	4,41E-01	5,78E-01
056. Acidification	4,04E-01	5,86E-01	1,00E+00	6,50E-01	4,73E-01	4,07E-01
057. Eutrophication, freshwater	4,04E-01	5,86E-01	1,00E+00	6,50E-01	4,37E-01	4,10E-01
058. Eutrophication, marine	4,15E-01	5,86E-01	1,00E+00	6,50E-01	5,41E-01	4,34E-01
059. Eutrophication, terrestrial	4,07E-01	5,86E-01	1,00E+00	6,50E-01	5,34E-01	4,25E-01
060. Photochemical ozone formation	4,09E-01	5,86E-01	1,00E+00	6,50E-01	5,14E-01	4,28E-01
061. Resource use, minerals and metals	3,91E-01	5,86E-01	1,00E+00	6,50E-01	4,79E-01	3,93E-01
062. Resource use, fossils	4,45E-01	5,86E-01	1,00E+00	6,50E-01	4,47E-01	5,87E-01
063. Water use	4,42E-01	5,86E-01	1,00E+00	6,50E-01	4,42E-01	4,45E-01
064. Particulate matter	4,13E-01	5,86E-01	1,00E+00	6,50E-01	5,02E-01	4,30E-01
065. Ionising radiation	4,16E-01	5,86E-01	1,00E+00	6,50E-01	4,28E-01	5,11E-01
066. Ecotoxicity, freshwater	3,99E-01	5,86E-01	1,00E+00	6,50E-01	4,42E-01	4,06E-01
067. Human toxicity, cancer	4,03E-01	5,86E-01	1,00E+00	6,50E-01	4,19E-01	4,08E-01
068. Human toxicity, non-cancer	4,00E-01	5,86E-01	1,00E+00	6,50E-01	5,05E-01	4,01E-01
069. Land use	5,78E-01	5,86E-01	1,00E+00	6,50E-01	5,03E-01	7,79E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	46/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9710						
051. Climate change	5,18E-01	6,05E-01	1,00E+00	9,17E-01	6,21E-01	4,69E-01
052. Climate change - Fossil	5,34E-01	6,05E-01	1,00E+00	9,17E-01	6,21E-01	5,47E-01
053. Climate change - Biogenic	1,05E+00	6,05E-01	1,00E+00	9,17E-01	8,22E-01	9,81E-01
054. Climate change - Land use and LU ch	6,16E-01	6,05E-01	1,00E+00	9,17E-01	4,07E-01	5,59E-01
055. Ozone depletion	4,71E-01	6,05E-01	1,00E+00	9,17E-01	4,02E-01	5,75E-01
056. Acidification	3,91E-01	6,05E-01	1,00E+00	9,17E-01	4,55E-01	3,49E-01
057. Eutrophication, freshwater	4,25E-01	6,05E-01	1,00E+00	9,17E-01	4,11E-01	3,54E-01
058. Eutrophication, marine	4,80E-01	6,05E-01	1,00E+00	9,17E-01	5,41E-01	3,89E-01
059. Eutrophication, terrestrial	4,56E-01	6,05E-01	1,00E+00	9,17E-01	5,32E-01	3,76E-01
060. Photochemical ozone formation	4,52E-01	6,05E-01	1,00E+00	9,17E-01	5,07E-01	3,80E-01
061. Resource use, minerals and metals	5,26E-01	6,05E-01	1,00E+00	9,17E-01	4,32E-01	4,84E-01
062. Resource use, fossils	5,40E-01	6,05E-01	1,00E+00	9,17E-01	4,19E-01	5,89E-01
063. Water use	5,17E-01	6,05E-01	1,00E+00	9,17E-01	3,35E-01	4,12E-01
064. Particulate matter	4,50E-01	6,05E-01	1,00E+00	9,17E-01	4,98E-01	3,78E-01
065. Ionising radiation	5,22E-01	6,05E-01	1,00E+00	9,17E-01	4,00E-01	5,11E-01
066. Ecotoxicity, freshwater	4,15E-01	6,05E-01	1,00E+00	9,17E-01	3,47E-01	3,50E-01
067. Human toxicity, cancer	3,96E-01	6,05E-01	1,00E+00	9,17E-01	3,92E-01	3,56E-01
068. Human toxicity, non-cancer	3,63E-01	6,05E-01	1,00E+00	9,17E-01	4,82E-01	3,43E-01
069. Land use	6,26E-01	6,05E-01	1,00E+00	9,17E-01	4,80E-01	7,63E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	47/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007130F9715						
051. Climate change	5,65E-01	6,78E-01	1,00E+00	9,17E-01	6,90E-01	5,83E-01
052. Climate change - Fossil	5,80E-01	6,78E-01	1,00E+00	9,17E-01	6,89E-01	6,45E-01
053. Climate change - Biogenic	1,05E+00	6,78E-01	1,00E+00	9,17E-01	8,61E-01	9,87E-01
054. Climate change - Land use and LU ch	6,55E-01	6,78E-01	1,00E+00	9,17E-01	5,49E-01	6,56E-01
055. Ozone depletion	5,57E-01	6,78E-01	1,00E+00	9,17E-01	5,50E-01	6,66E-01
056. Acidification	5,26E-01	6,78E-01	1,00E+00	9,17E-01	5,80E-01	5,18E-01
057. Eutrophication, freshwater	5,34E-01	6,78E-01	1,00E+00	9,17E-01	5,50E-01	5,21E-01
058. Eutrophication, marine	5,53E-01	6,78E-01	1,00E+00	9,17E-01	6,38E-01	5,42E-01
059. Eutrophication, terrestrial	5,43E-01	6,78E-01	1,00E+00	9,17E-01	6,32E-01	5,35E-01
060. Photochemical ozone formation	5,43E-01	6,78E-01	1,00E+00	9,17E-01	6,15E-01	5,37E-01
061. Resource use, minerals and metals	5,50E-01	6,78E-01	1,00E+00	9,17E-01	5,80E-01	5,41E-01
062. Resource use, fossils	5,84E-01	6,78E-01	1,00E+00	9,17E-01	5,57E-01	6,74E-01
063. Water use	5,77E-01	6,78E-01	1,00E+00	9,17E-01	5,39E-01	5,54E-01
064. Particulate matter	5,45E-01	6,78E-01	1,00E+00	9,17E-01	6,07E-01	5,38E-01
065. Ionising radiation	5,63E-01	6,78E-01	1,00E+00	9,17E-01	5,42E-01	6,14E-01
066. Ecotoxicity, freshwater	5,29E-01	6,78E-01	1,00E+00	9,17E-01	5,41E-01	5,18E-01
067. Human toxicity, cancer	5,27E-01	6,78E-01	1,00E+00	9,17E-01	5,35E-01	5,20E-01
068. Human toxicity, non-cancer	5,17E-01	6,78E-01	1,00E+00	9,17E-01	6,05E-01	5,13E-01
069. Land use	6,78E-01	6,78E-01	1,00E+00	9,17E-01	6,03E-01	8,22E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	48/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9210						
051. Climate change	1,88E-01	4,26E-01	1,01E+00	3,32E-01	4,54E-01	2,82E-01
052. Climate change - Fossil	2,15E-01	4,26E-01	1,41E+00	3,32E-01	4,53E-01	3,89E-01
053. Climate change - Biogenic	1,10E+00	4,26E-01	1,00E+00	3,32E-01	7,49E-01	9,80E-01
054. Climate change - Land use and LU ch	3,37E-01	4,26E-01	1,01E+00	3,32E-01	2,17E-01	3,87E-01
055. Ozone depletion	1,79E-01	4,26E-01	1,01E+00	3,32E-01	2,24E-01	4,18E-01
056. Acidification	1,60E-01	4,26E-01	1,02E+00	3,32E-01	2,69E-01	1,72E-01
057. Eutrophication, freshwater	1,52E-01	4,26E-01	1,01E+00	3,32E-01	2,18E-01	1,76E-01
058. Eutrophication, marine	1,61E-01	4,26E-01	1,02E+00	3,32E-01	3,68E-01	2,12E-01
059. Eutrophication, terrestrial	1,57E-01	4,26E-01	1,02E+00	3,32E-01	3,58E-01	1,99E-01
060. Photochemical ozone formation	1,63E-01	4,26E-01	1,02E+00	3,32E-01	3,28E-01	2,03E-01
061. Resource use, minerals and metals	1,06E-01	4,26E-01	1,00E+00	3,32E-01	2,90E-01	1,19E-01
062. Resource use, fossils	2,15E-01	4,26E-01	1,01E+00	3,32E-01	2,30E-01	4,39E-01
063. Water use	1,81E-01	4,26E-01	1,02E+00	3,32E-01	2,51E-01	2,28E-01
064. Particulate matter	1,68E-01	4,26E-01	1,01E+00	3,32E-01	3,12E-01	2,06E-01
065. Ionising radiation	1,54E-01	4,26E-01	1,00E+00	3,32E-01	2,01E-01	3,12E-01
066. Ecotoxicity, freshwater	1,44E-01	4,26E-01	1,01E+00	3,32E-01	2,46E-01	1,70E-01
067. Human toxicity, cancer	1,57E-01	4,26E-01	1,02E+00	3,32E-01	1,84E-01	1,71E-01
068. Human toxicity, non-cancer	1,57E-01	4,26E-01	1,04E+00	3,32E-01	3,21E-01	1,63E-01
069. Land use	3,93E-01	4,26E-01	1,01E+00	3,32E-01	3,19E-01	6,92E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	49/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9275						
051. Climate change	3,56E-01	5,50E-01	1,01E+00	6,64E-01	5,85E-01	4,60E-01
052. Climate change - Fossil	3,78E-01	5,50E-01	1,41E+00	6,64E-01	5,84E-01	5,40E-01
053. Climate change - Biogenic	1,09E+00	5,50E-01	1,00E+00	6,64E-01	7,92E-01	9,85E-01
054. Climate change - Land use and LU ch	4,49E-01	5,50E-01	1,01E+00	6,64E-01	3,90E-01	5,10E-01
055. Ozone depletion	3,31E-01	5,50E-01	1,01E+00	6,64E-01	3,95E-01	5,50E-01
056. Acidification	3,33E-01	5,50E-01	1,02E+00	6,64E-01	4,30E-01	3,52E-01
057. Eutrophication, freshwater	3,15E-01	5,50E-01	1,01E+00	6,64E-01	3,89E-01	3,55E-01
058. Eutrophication, marine	3,12E-01	5,50E-01	1,02E+00	6,64E-01	5,15E-01	3,86E-01
059. Eutrophication, terrestrial	3,19E-01	5,50E-01	1,02E+00	6,64E-01	5,06E-01	3,75E-01
060. Photochemical ozone formation	3,29E-01	5,50E-01	1,02E+00	6,64E-01	4,81E-01	3,79E-01
061. Resource use, minerals and metals	2,41E-01	5,50E-01	1,00E+00	6,64E-01	4,59E-01	2,65E-01
062. Resource use, fossils	3,68E-01	5,50E-01	1,01E+00	6,64E-01	4,00E-01	5,79E-01
063. Water use	2,97E-01	5,50E-01	1,02E+00	6,64E-01	4,37E-01	4,00E-01
064. Particulate matter	3,29E-01	5,50E-01	1,01E+00	6,64E-01	4,68E-01	3,82E-01
065. Ionising radiation	2,94E-01	5,50E-01	1,00E+00	6,64E-01	3,73E-01	4,54E-01
066. Ecotoxicity, freshwater	3,07E-01	5,50E-01	1,01E+00	6,64E-01	4,29E-01	3,49E-01
067. Human toxicity, cancer	3,26E-01	5,50E-01	1,02E+00	6,64E-01	3,56E-01	3,49E-01
068. Human toxicity, non-cancer	3,34E-01	5,50E-01	1,04E+00	6,64E-01	4,78E-01	3,45E-01
069. Land use	5,00E-01	5,50E-01	1,01E+00	6,64E-01	4,79E-01	7,58E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	50/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9270						
051. Climate change	2,29E-01	4,58E-01	1,01E+00	3,32E-01	4,87E-01	3,29E-01
052. Climate change - Fossil	2,55E-01	4,58E-01	1,41E+00	3,32E-01	4,86E-01	4,29E-01
053. Climate change - Biogenic	1,10E+00	4,58E-01	1,00E+00	3,32E-01	7,62E-01	9,81E-01
054. Climate change - Land use and LU ch	3,66E-01	4,58E-01	1,01E+00	3,32E-01	2,67E-01	4,22E-01
055. Ozone depletion	2,21E-01	4,58E-01	1,01E+00	3,32E-01	2,73E-01	4,54E-01
056. Acidification	2,09E-01	4,58E-01	1,02E+00	3,32E-01	3,14E-01	2,25E-01
057. Eutrophication, freshwater	1,98E-01	4,58E-01	1,01E+00	3,32E-01	2,67E-01	2,29E-01
058. Eutrophication, marine	2,01E-01	4,58E-01	1,02E+00	3,32E-01	4,07E-01	2,63E-01
059. Eutrophication, terrestrial	2,00E-01	4,58E-01	1,02E+00	3,32E-01	3,97E-01	2,50E-01
060. Photochemical ozone formation	2,08E-01	4,58E-01	1,02E+00	3,32E-01	3,70E-01	2,54E-01
061. Resource use, minerals and metals	1,41E-01	4,58E-01	1,00E+00	3,32E-01	3,38E-01	1,58E-01
062. Resource use, fossils	2,52E-01	4,58E-01	1,01E+00	3,32E-01	2,79E-01	4,76E-01
063. Water use	2,11E-01	4,58E-01	1,02E+00	3,32E-01	3,07E-01	2,77E-01
064. Particulate matter	2,11E-01	4,58E-01	1,01E+00	3,32E-01	3,55E-01	2,58E-01
065. Ionising radiation	1,90E-01	4,58E-01	1,00E+00	3,32E-01	2,51E-01	3,52E-01
066. Ecotoxicity, freshwater	1,90E-01	4,58E-01	1,01E+00	3,32E-01	3,00E-01	2,23E-01
067. Human toxicity, cancer	2,05E-01	4,58E-01	1,02E+00	3,32E-01	2,33E-01	2,24E-01
068. Human toxicity, non-cancer	2,09E-01	4,58E-01	1,04E+00	3,32E-01	3,64E-01	2,17E-01
069. Land use	4,22E-01	4,58E-01	1,01E+00	3,32E-01	3,63E-01	7,11E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	51/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9215						
051. Climate change	3,02E-01	4,98E-01	1,01E+00	5,96E-01	5,33E-01	3,81E-01
052. Climate change - Fossil	3,26E-01	4,98E-01	1,41E+00	5,96E-01	5,33E-01	4,73E-01
053. Climate change - Biogenic	1,09E+00	4,98E-01	1,00E+00	5,96E-01	7,69E-01	9,81E-01
054. Climate change - Land use and LU ch	4,09E-01	4,98E-01	1,01E+00	5,96E-01	3,01E-01	4,48E-01
055. Ozone depletion	2,66E-01	4,98E-01	1,01E+00	5,96E-01	3,05E-01	4,89E-01
056. Acidification	2,46E-01	4,98E-01	1,02E+00	5,96E-01	3,51E-01	2,53E-01
057. Eutrophication, freshwater	2,39E-01	4,98E-01	1,01E+00	5,96E-01	3,02E-01	2,56E-01
058. Eutrophication, marine	2,52E-01	4,98E-01	1,02E+00	5,96E-01	4,49E-01	2,93E-01
059. Eutrophication, terrestrial	2,51E-01	4,98E-01	1,02E+00	5,96E-01	4,38E-01	2,80E-01
060. Photochemical ozone formation	2,60E-01	4,98E-01	1,02E+00	5,96E-01	4,10E-01	2,85E-01
061. Resource use, minerals and metals	2,00E-01	4,98E-01	1,00E+00	5,96E-01	3,71E-01	2,10E-01
062. Resource use, fossils	3,18E-01	4,98E-01	1,01E+00	5,96E-01	3,13E-01	5,18E-01
063. Water use	2,50E-01	4,98E-01	1,02E+00	5,96E-01	3,25E-01	3,11E-01
064. Particulate matter	2,59E-01	4,98E-01	1,01E+00	5,96E-01	3,95E-01	2,87E-01
065. Ionising radiation	2,47E-01	4,98E-01	1,00E+00	5,96E-01	2,84E-01	3,86E-01
066. Ecotoxicity, freshwater	2,30E-01	4,98E-01	1,01E+00	5,96E-01	3,21E-01	2,50E-01
067. Human toxicity, cancer	2,41E-01	4,98E-01	1,02E+00	5,96E-01	2,67E-01	2,52E-01
068. Human toxicity, non-cancer	2,39E-01	4,98E-01	1,04E+00	5,96E-01	4,00E-01	2,44E-01
069. Land use	4,57E-01	4,98E-01	1,01E+00	5,96E-01	4,01E-01	7,22E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	52/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9280						
051. Climate change	4,72E-01	6,26E-01	1,01E+00	6,64E-01	6,68E-01	5,65E-01
052. Climate change - Fossil	4,91E-01	6,26E-01	1,41E+00	6,64E-01	6,68E-01	6,29E-01
053. Climate change - Biogenic	1,09E+00	6,26E-01	1,00E+00	6,64E-01	8,15E-01	9,87E-01
054. Climate change - Land use and LU ch	5,23E-01	6,26E-01	1,01E+00	6,64E-01	4,82E-01	5,75E-01
055. Ozone depletion	4,24E-01	6,26E-01	1,01E+00	6,64E-01	4,85E-01	6,26E-01
056. Acidification	4,25E-01	6,26E-01	1,02E+00	6,64E-01	5,19E-01	4,41E-01
057. Eutrophication, freshwater	4,06E-01	6,26E-01	1,01E+00	6,64E-01	4,82E-01	4,43E-01
058. Eutrophication, marine	4,05E-01	6,26E-01	1,02E+00	6,64E-01	6,01E-01	4,74E-01
059. Eutrophication, terrestrial	4,17E-01	6,26E-01	1,02E+00	6,64E-01	5,93E-01	4,63E-01
060. Photochemical ozone formation	4,30E-01	6,26E-01	1,02E+00	6,64E-01	5,69E-01	4,67E-01
061. Resource use, minerals and metals	3,37E-01	6,26E-01	1,00E+00	6,64E-01	5,53E-01	3,58E-01
062. Resource use, fossils	4,74E-01	6,26E-01	1,01E+00	6,64E-01	4,90E-01	6,63E-01
063. Water use	3,69E-01	6,26E-01	1,02E+00	6,64E-01	5,32E-01	4,90E-01
064. Particulate matter	4,25E-01	6,26E-01	1,01E+00	6,64E-01	5,58E-01	4,69E-01
065. Ionising radiation	3,89E-01	6,26E-01	1,00E+00	6,64E-01	4,63E-01	5,33E-01
066. Ecotoxicity, freshwater	3,98E-01	6,26E-01	1,01E+00	6,64E-01	5,22E-01	4,36E-01
067. Human toxicity, cancer	4,17E-01	6,26E-01	1,02E+00	6,64E-01	4,45E-01	4,37E-01
068. Human toxicity, non-cancer	4,22E-01	6,26E-01	1,04E+00	6,64E-01	5,67E-01	4,33E-01
069. Land use	5,66E-01	6,26E-01	1,01E+00	6,64E-01	5,70E-01	7,91E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	53/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9300						
051. Climate change	4,50E-01	6,04E-01	1,01E+00	5,96E-01	6,42E-01	5,34E-01
052. Climate change - Fossil	4,69E-01	6,04E-01	1,41E+00	5,96E-01	6,42E-01	6,03E-01
053. Climate change - Biogenic	1,08E+00	6,04E-01	1,00E+00	5,96E-01	8,07E-01	9,86E-01
054. Climate change - Land use and LU ch	5,14E-01	6,04E-01	1,01E+00	5,96E-01	4,55E-01	5,59E-01
055. Ozone depletion	4,05E-01	6,04E-01	1,01E+00	5,96E-01	4,55E-01	6,02E-01
056. Acidification	4,01E-01	6,04E-01	1,02E+00	5,96E-01	4,92E-01	4,13E-01
057. Eutrophication, freshwater	3,88E-01	6,04E-01	1,01E+00	5,96E-01	4,54E-01	4,15E-01
058. Eutrophication, marine	3,89E-01	6,04E-01	1,02E+00	5,96E-01	5,74E-01	4,48E-01
059. Eutrophication, terrestrial	3,99E-01	6,04E-01	1,02E+00	5,96E-01	5,66E-01	4,36E-01
060. Photochemical ozone formation	4,10E-01	6,04E-01	1,02E+00	5,96E-01	5,42E-01	4,41E-01
061. Resource use, minerals and metals	3,33E-01	6,04E-01	1,00E+00	5,96E-01	5,17E-01	3,49E-01
062. Resource use, fossils	4,53E-01	6,04E-01	1,01E+00	5,96E-01	4,63E-01	6,38E-01
063. Water use	3,51E-01	6,04E-01	1,02E+00	5,96E-01	4,83E-01	4,64E-01
064. Particulate matter	4,04E-01	6,04E-01	1,01E+00	5,96E-01	5,31E-01	4,42E-01
065. Ionising radiation	3,79E-01	6,04E-01	1,00E+00	5,96E-01	4,36E-01	5,13E-01
066. Ecotoxicity, freshwater	3,79E-01	6,04E-01	1,01E+00	5,96E-01	4,77E-01	4,10E-01
067. Human toxicity, cancer	3,95E-01	6,04E-01	1,02E+00	5,96E-01	4,20E-01	4,10E-01
068. Human toxicity, non-cancer	3,98E-01	6,04E-01	1,04E+00	5,96E-01	5,35E-01	4,05E-01
069. Land use	5,57E-01	6,04E-01	1,01E+00	5,96E-01	5,39E-01	7,81E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	54/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9220						
051. Climate change	4,21E-01	5,78E-01	1,01E+00	8,60E-01	6,22E-01	4,92E-01
052. Climate change - Fossil	4,41E-01	5,78E-01	1,41E+00	8,60E-01	6,21E-01	5,67E-01
053. Climate change - Biogenic	1,09E+00	5,78E-01	1,00E+00	8,60E-01	7,95E-01	9,84E-01
054. Climate change - Land use and LU ch	4,85E-01	5,78E-01	1,01E+00	8,60E-01	4,02E-01	5,17E-01
055. Ozone depletion	3,66E-01	5,78E-01	1,01E+00	8,60E-01	4,04E-01	5,71E-01
056. Acidification	3,44E-01	5,78E-01	1,02E+00	8,60E-01	4,47E-01	3,48E-01
057. Eutrophication, freshwater	3,35E-01	5,78E-01	1,01E+00	8,60E-01	4,03E-01	3,51E-01
058. Eutrophication, marine	3,49E-01	5,78E-01	1,02E+00	8,60E-01	5,42E-01	3,88E-01
059. Eutrophication, terrestrial	3,53E-01	5,78E-01	1,02E+00	8,60E-01	5,32E-01	3,74E-01
060. Photochemical ozone formation	3,64E-01	5,78E-01	1,02E+00	8,60E-01	5,04E-01	3,79E-01
061. Resource use, minerals and metals	2,96E-01	5,78E-01	1,00E+00	8,60E-01	4,77E-01	3,05E-01
062. Resource use, fossils	4,27E-01	5,78E-01	1,01E+00	8,60E-01	4,11E-01	6,07E-01
063. Water use	3,25E-01	5,78E-01	1,02E+00	8,60E-01	4,42E-01	4,08E-01
064. Particulate matter	3,59E-01	5,78E-01	1,01E+00	8,60E-01	4,93E-01	3,80E-01
065. Ionising radiation	3,44E-01	5,78E-01	1,00E+00	8,60E-01	3,82E-01	4,70E-01
066. Ecotoxicity, freshwater	3,25E-01	5,78E-01	1,01E+00	8,60E-01	4,33E-01	3,44E-01
067. Human toxicity, cancer	3,37E-01	5,78E-01	1,02E+00	8,60E-01	3,62E-01	3,46E-01
068. Human toxicity, non-cancer	3,35E-01	5,78E-01	1,04E+00	8,60E-01	4,99E-01	3,39E-01
069. Land use	5,25E-01	5,78E-01	1,01E+00	8,60E-01	5,01E-01	7,58E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	55/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9225						
051. Climate change	5,50E-01	6,73E-01	1,01E+00	7,34E-01	7,22E-01	6,27E-01
052. Climate change - Fossil	5,66E-01	6,73E-01	1,41E+00	7,34E-01	7,22E-01	6,82E-01
053. Climate change - Biogenic	1,08E+00	6,73E-01	1,00E+00	7,34E-01	8,27E-01	9,87E-01
054. Climate change - Land use and LU ch	5,69E-01	6,73E-01	1,01E+00	7,34E-01	5,31E-01	6,09E-01
055. Ozone depletion	4,80E-01	6,73E-01	1,01E+00	7,34E-01	5,31E-01	6,71E-01
056. Acidification	4,73E-01	6,73E-01	1,02E+00	7,34E-01	5,68E-01	4,82E-01
057. Eutrophication, freshwater	4,56E-01	6,73E-01	1,01E+00	7,34E-01	5,31E-01	4,84E-01
058. Eutrophication, marine	4,62E-01	6,73E-01	1,02E+00	7,34E-01	6,53E-01	5,18E-01
059. Eutrophication, terrestrial	4,75E-01	6,73E-01	1,02E+00	7,34E-01	6,44E-01	5,05E-01
060. Photochemical ozone formation	4,89E-01	6,73E-01	1,02E+00	7,34E-01	6,19E-01	5,10E-01
061. Resource use, minerals and metals	3,98E-01	6,73E-01	1,00E+00	7,34E-01	6,04E-01	4,15E-01
062. Resource use, fossils	5,44E-01	6,73E-01	1,01E+00	7,34E-01	5,38E-01	7,13E-01
063. Water use	4,13E-01	6,73E-01	1,02E+00	7,34E-01	5,80E-01	5,36E-01
064. Particulate matter	4,81E-01	6,73E-01	1,01E+00	7,34E-01	6,11E-01	5,11E-01
065. Ionising radiation	4,50E-01	6,73E-01	1,00E+00	7,34E-01	5,10E-01	5,76E-01
066. Ecotoxicity, freshwater	4,46E-01	6,73E-01	1,01E+00	7,34E-01	5,69E-01	4,77E-01
067. Human toxicity, cancer	4,64E-01	6,73E-01	1,02E+00	7,34E-01	4,90E-01	4,78E-01
068. Human toxicity, non-cancer	4,66E-01	6,73E-01	1,04E+00	7,34E-01	6,17E-01	4,74E-01
069. Land use	6,05E-01	6,73E-01	1,01E+00	7,34E-01	6,21E-01	8,08E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	56/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9245						
051. Climate change	5,53E-01	6,78E-01	1,01E+00	7,34E-01	7,26E-01	6,34E-01
052. Climate change - Fossil	5,69E-01	6,78E-01	1,41E+00	7,34E-01	7,26E-01	6,88E-01
053. Climate change - Biogenic	1,08E+00	6,78E-01	1,00E+00	7,34E-01	8,29E-01	9,88E-01
054. Climate change - Land use and LU ch	5,71E-01	6,78E-01	1,01E+00	7,34E-01	5,40E-01	6,15E-01
055. Ozone depletion	4,85E-01	6,78E-01	1,01E+00	7,34E-01	5,40E-01	6,76E-01
056. Acidification	4,81E-01	6,78E-01	1,02E+00	7,34E-01	5,76E-01	4,92E-01
057. Eutrophication, freshwater	4,63E-01	6,78E-01	1,01E+00	7,34E-01	5,39E-01	4,94E-01
058. Eutrophication, marine	4,66E-01	6,78E-01	1,02E+00	7,34E-01	6,59E-01	5,27E-01
059. Eutrophication, terrestrial	4,80E-01	6,78E-01	1,02E+00	7,34E-01	6,50E-01	5,15E-01
060. Photochemical ozone formation	4,94E-01	6,78E-01	1,02E+00	7,34E-01	6,26E-01	5,20E-01
061. Resource use, minerals and metals	3,99E-01	6,78E-01	1,00E+00	7,34E-01	6,13E-01	4,18E-01
062. Resource use, fossils	5,47E-01	6,78E-01	1,01E+00	7,34E-01	5,46E-01	7,18E-01
063. Water use	4,17E-01	6,78E-01	1,02E+00	7,34E-01	5,92E-01	5,45E-01
064. Particulate matter	4,87E-01	6,78E-01	1,01E+00	7,34E-01	6,17E-01	5,20E-01
065. Ionising radiation	4,52E-01	6,78E-01	1,00E+00	7,34E-01	5,18E-01	5,82E-01
066. Ecotoxicity, freshwater	4,53E-01	6,78E-01	1,01E+00	7,34E-01	5,81E-01	4,88E-01
067. Human toxicity, cancer	4,71E-01	6,78E-01	1,02E+00	7,34E-01	4,99E-01	4,88E-01
068. Human toxicity, non-cancer	4,75E-01	6,78E-01	1,04E+00	7,34E-01	6,24E-01	4,84E-01
069. Land use	6,09E-01	6,78E-01	1,01E+00	7,34E-01	6,29E-01	8,11E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	57/60	
© Copyright 2022 ABB. All rights reserved.						

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

* if the coefficient is "1", the impacts of the phase of the life cycle are assimilated to the Reference product, meaning that the impacts are unchanged in comparison to the Reference product

Product name	Manufacturing	Distribution	Installation	Use	End of life	Benefits
1SPA007131F9230						
051. Climate change	7,84E-01	8,26E-01	1,01E+00	9,98E-01	8,90E-01	8,37E-01
052. Climate change - Fossil	7,92E-01	8,26E-01	1,41E+00	9,98E-01	8,90E-01	8,60E-01
053. Climate change - Biogenic	1,07E+00	8,26E-01	1,00E+00	9,98E-01	8,72E-01	9,92E-01
054. Climate change - Land use and LU ch	7,16E-01	8,26E-01	1,01E+00	9,98E-01	7,16E-01	7,40E-01
055. Ozone depletion	6,67E-01	8,26E-01	1,01E+00	9,98E-01	7,11E-01	8,23E-01
056. Acidification	6,57E-01	8,26E-01	1,02E+00	9,98E-01	7,46E-01	6,58E-01
057. Eutrophication, freshwater	6,39E-01	8,26E-01	1,01E+00	9,98E-01	7,16E-01	6,59E-01
058. Eutrophication, marine	6,49E-01	8,26E-01	1,02E+00	9,98E-01	8,27E-01	6,93E-01
059. Eutrophication, terrestrial	6,71E-01	8,26E-01	1,02E+00	9,98E-01	8,19E-01	6,81E-01
060. Photochemical ozone formation	6,89E-01	8,26E-01	1,02E+00	9,98E-01	7,95E-01	6,86E-01
061. Resource use, minerals and metals	5,88E-01	8,26E-01	1,00E+00	9,98E-01	7,91E-01	6,01E-01
062. Resource use, fossils	7,56E-01	8,26E-01	1,01E+00	9,98E-01	7,19E-01	8,81E-01
063. Water use	5,57E-01	8,26E-01	1,02E+00	9,98E-01	7,70E-01	7,16E-01
064. Particulate matter	6,73E-01	8,26E-01	1,01E+00	9,98E-01	7,91E-01	6,85E-01
065. Ionising radiation	6,40E-01	8,26E-01	1,00E+00	9,98E-01	6,90E-01	7,33E-01
066. Ecotoxicity, freshwater	6,27E-01	8,26E-01	1,01E+00	9,98E-01	7,56E-01	6,52E-01
067. Human toxicity, cancer	6,44E-01	8,26E-01	1,02E+00	9,98E-01	6,68E-01	6,53E-01
068. Human toxicity, non-cancer	6,44E-01	8,26E-01	1,04E+00	9,98E-01	7,95E-01	6,49E-01
069. Land use	7,38E-01	8,26E-01	1,01E+00	9,98E-01	8,03E-01	8,74E-01
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE	
Approved	Public	ABBG-00120-V01.01-EN	1	en	58/60	
© Copyright 2022 ABB. All rights reserved.						

Registration number:	ABBG-00120-V01.01-EN	Drafting Rules:	PCR-ed4-EN-2021 09 06
Verifier accreditation number:	VH42	Supplemented by:	PSR-0005-ed2-EN-2016 03 29
Date of issue:	December 2022	Information and reference documents:	www.pep-ecopassport.org
Validity period:	5 years	Independent verification of the declaration and data, in compliance with ISO 14025: 2010	
Internal <input type="radio"/>		External <input checked="" type="radio"/>	
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 components of the present PEP may not be compared with components from any other program.			
Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations"			



STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	59/60

© Copyright 2022 ABB. All rights reserved.

Environmental Impact Indicator Glossary

Impact indicators

Indicator	Description	Unit
Global warming potential (GWP) - total	Indicator of potential global warming caused by emissions to air contributing to the greenhouse effect. The total global warming potential (GWP-total) is the sum of three sub-categories of climate change. GWP-total = GWP-fossil + GWP-biogenic + GWP- land use and land use change	kg CO ₂ eq.
Ozone depletion (ODP)	Emissions to air that contribute to the destruction of the stratospheric ozone layer	kg CFC-11 eq.
Acidification of soil and water (A)	Acidification of soils and water caused by the release of certain gases to the atmosphere, such as nitrogen oxides and sulphur oxides	H+ eq.
Eutrophication (E)	Indicator of the contribution to eutrophication of water by the enrichment of the aquatic ecosystem with nutritional elements, e.g. industrial or domestic effluents, agriculture, etc. This indicator is divided to three: freshwater, marine and terrestrial.	kg P eq., kg N eq., mole N eq.
Photochemical ozone creation (POCP)	Indicator of emissions of gases that affect the creation of photochemical ozone in the lower atmosphere (smog) because of the rays of the sun.	kg NMVOC eq.
Depletion of abiotic resources – elements (ADPe)	Indicator of the depletion of natural non-fossil resources	kg Sb eq.
Depletion of abiotic resources – fossil fuels (ADPf)	The use of non-renewable fossil resources in an unsustainable way (e.g. from material to waste)	MJ (lower heating value)
Water Deprivation potential (WDP)	Deprivation-weighted water consumption. Assesses the potential of water deprivation, to either humans or ecosystems, building on the assumption that the less water remaining available per area, the more likely another user will be deprived.	m ³ e depr.

Resource use indicators

Indicator	Description	Unit
Total use of primary energy	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) + Total use of renewable primary energy re-sources (primary energy and primary energy resources used as raw materials)	MJ (lower heating value)

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00120-V01.01-EN	1	en	60/60