



NZM2 Molded Case Circuit Breaker (IEC) with Electronic Trip Unit and Plug-in Technology

Representative product	NZMN2-4-VE250-SVE (Y7-113280) Product Category: Circuit Breakers
Description of the product	Eaton Moeller series NZM molded case circuit breaker with electronic trip unit is designed to protect the installation from overload and short circuits. It is used in unearthed supply systems up to 690 V. It comes with Built-in device electronic trip unit and plug-in technique as mounting method. The NZM circuit breakers protect entire systems and cables across all levels, from the main distribution board all the way to the load itself. These switch disconnectors have total 4 poles.
Homogeneous Environmental Families Covered	The PEP concerns following product offerings from Eaton Moeller series NZM molded case circuit breaker with electronic trip unit as mentioned below: • Series: NZM Circuit Breaker • Switching Capacity: H (High), L (Limiter), N (Normal), S (Strong) • Rated Current – Classic full Electronics (VE): 250A, 400A, 630A, • Rated Current – Classic Motor Electronics (AE): 220A, 350A, 450A, • No. of Poles: 3, 4 • Mounting Method – Plug-in Unit
Functional unit	“Protect the installation from overloads and short circuits in a circuit with rated voltage 690V, rated current 250A, with 4 poles, a rated breaking capacity 20 kA, and IP20 Rating, in the Industrial application area, according to the appropriate use scenario, and during the reference service life of the product of 20 years.”
Company information	Eaton Electro Productie s.r.l, Independentei 8, Sarbi, Romania, 437157 Email: productstewardship-es@eaton.com

Constituent Materials			
Reference product mass	3.92E+00 Kg (With packaging)		
Category PEP Material	Material constituent	Mass (kg)	% Contribution
Metals	Copper	1.24E+00	31.6%
Plastics	Polycarbonate	7.41E-01	18.9%
Plastics	Unsaturated Polyester	6.44E-01	16.4%
Metals	Steel	3.17E-01	8.1%
Metals	Stainless steel	1.78E-01	4.5%
Others	Cardboard	1.45E-01	3.7%
Metals	Ferromagnet	1.42E-01	3.6%
Plastics	Polyamide66	1.34E-01	3.4%
Plastics	Polybutylene Terephthalate GF 30	8.26E-02	2.1%
Others	wood	7.00E-02	1.8%
Others	PCB	6.16E-02	1.6%
Plastics	Polyamide66 GF30	5.13E-02	1.3%
Plastics	Polyurethane	3.60E-02	0.9%
Others	Paper	2.46E-02	0.6%
Metals	SILVER	1.52E-02	0.4%
Others	Miscellaneous	3.73E-02	1.0%
Total		3.92E+00	100.0%

Substance Assessment

The representative product is compliant with the EU-RoHS Directive (2011/65/EU) with exemption and the product does contain lead and Perfluoro butane sulfonic acid (PFBS) and its salts and diboron trioxide and lead monoxide and Lead titanium zirconium oxide as substance listed as Substance-of-Very-High-Concern (SVHC) on the Candidate List of the EU-REACH Regulation (1907/2006/ECHA).

Additional Environmental Information

Manufacturing	The reference product is assembled at an Eaton plant Sarbi, Romania holding management system certifications according to ISO 14001 standards.
Distribution	Eaton is committed to minimizing weight and volume of product and packaging with focus to optimize transport efficiency.
Installation	The installation process does not require any energy consumption and there is no waste other than the obsolete product packaging generated during this step.
Use	The product requires energy consumption during operation.
End of life	The recyclability rate of the overall product is 68.80% if it is properly dismantled prior to shredding. The rate is calculated based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental Impacts	
The calculation of the environmental impacts is the result of the Product's Life Cycle Analysis in accordance with ISO 14040/44, covering the entire lifecycle, i.e., "Cradle-to-Grave" including the following life cycle phases: production, distribution, installation, use and end of life. System modelling was carried out using the commercial LCA software EIME v6.2.3 with database version CODDE-2024-06-04. Indicators Set: PEF EF 3.1 (Compliance: PEP ed.4, EN15804+A2) v2.0	
Manufacturing Phase	The product is assembled as well as packed at Eaton facility Eaton Electro Productie s.r.l, Independentei 8, Sarbi, Romania plant. Energy model used: Romania
Distribution Phase	Distribution of the product in its packaging from the Eaton's last logistics platform to the installation place in Europe is considered as per PCR rules.
Installation Phase	Product is installed in Europe. Installation of product and treatment of packaging waste are considered in this phase. There is no energy consumption for reference product. Energy model used: Europe
Use Phase	Reference lifetime: 20 Years Usage profile: The product has power loss of 51.56 W at full load condition. For Industrial applications considering 50% of the loading rate and 30% of the use time rate, total losses are 677.498 kWh over the 20 years. Product do not require any maintenance/replacement during useful life. Industrial application is considered as per PSR-0005 section 3.2.2. Energy model used: Europe
End of life Phase	Product disposed with WEEE guidelines. Energy model used: Europe
Module-D	Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario. It expresses the net benefits and loads beyond the boundaries of the system and are not to be included in the life cycle totals.

Environmental Impact Indicators: Mandatory

Mandatory environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Climate change – total (GWP)	kg CO ₂ eq.	2.72E+02	2.71E+01	9.33E-01	6.48E-01	2.39E+02	4.24E+00	-9.06E+00
Climate change - fossil fuels (GWP-f)	kg CO ₂ eq.	2.70E+02	2.69E+01	9.33E-01	2.59E-01	2.38E+02	3.99E+00	-8.95E+00
Climate change – biogenics (GWP-b)	kg CO ₂ eq.	1.30E+00	2.23E-01	0.00E+00	3.88E-01	4.39E-01	2.47E-01	-1.10E-01
Climate change - land use and land use transformation (GWP-lu)	kg CO ₂ eq.	1.03E-03	1.03E-03	0.00E+00	0.00E+00	0.00E+00	4.02E-06	-9.41E-04
Ozone depletion (ODP)	kg eq. CFC-11	5.46E-06	4.13E-06	1.43E-09	8.02E-09	1.16E-06	1.70E-07	-1.24E-06
Acidification (AP)	mole of H ⁺ eq.	1.67E+00	4.03E-01	5.92E-03	7.73E-04	1.22E+00	3.89E-02	-2.16E-01
Freshwater eutrophication (EP-fw)	kg P eq.	1.14E-02	3.15E-03	3.51E-07	2.57E-06	6.29E-04	7.58E-03	-7.15E-05

Mandatory environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Marine aquatic eutrophication (EP-m)	kg of N eq.	1.81E-01	2.31E-02	2.77E-03	2.87E-04	1.49E-01	6.14E-03	-7.19E-03
Terrestrial eutrophication (EP-t)	mole of N eq.	2.74E+00	2.60E-01	3.04E-02	2.08E-03	2.39E+00	5.43E-02	-7.68E-02
Photochemical ozone formation (POCP)	kg of NMVOC eq.	5.89E-01	9.73E-02	7.68E-03	5.29E-04	4.69E-01	1.41E-02	-3.62E-02
Depletion of abiotic resources – elements (ADPe)	kg eq. Sb	2.46E-02	2.42E-02	3.68E-08	1.73E-08	8.45E-05	2.45E-04	-9.60E-03
Depletion of abiotic resources - fossil fuels (ADP-f)	MJ	6.78E+03	5.92E+02	1.30E+01	2.16E+00	6.03E+03	1.41E+02	-1.98E+02
Water scarcity (WDP)	m³ of eq.. deprivation worldwide	8.99E+01	2.64E+01	3.55E-03	5.49E-02	1.83E+01	4.51E+01	-1.33E+01

Inventory Flow Indicators: Mandatory

Inventory flow indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	MJ	1.64E+03	3.50E+01	1.74E-02	1.15E+00	1.60E+03	7.92E+00	-1.01E+01
Use of renewable primary energy resources used as raw materials	MJ	5.17E+00	5.17E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.88E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	1.64E+03	4.02E+01	1.74E-02	1.15E+00	1.60E+03	7.92E+00	-1.30E+01
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	MJ	6.73E+03	5.43E+02	1.30E+01	2.16E+00	6.03E+03	1.41E+02	-1.72E+02
Use of non-renewable primary energy resources used as raw materials	MJ	4.95E+01	4.95E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.65E+01
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	6.78E+03	5.92E+02	1.30E+01	2.16E+00	6.03E+03	1.41E+02	-1.98E+02
Use of secondary materials	kg	2.16E-05	2.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of fresh water	m³	2.21E+00	6.16E-01	8.26E-05	2.05E-03	4.30E-01	1.16E+00	-3.09E-01
Hazardous waste disposed of	kg	2.95E+02	2.81E+02	0.00E+00	1.80E-02	1.05E+01	3.83E+00	-1.72E+02
Non-hazardous waste disposed of	kg	5.41E+01	1.24E+01	3.28E-02	9.89E-02	4.03E+01	1.25E+00	-3.40E+00
Radioactive waste disposed of	kg	3.04E-02	2.09E-02	2.34E-05	1.22E-05	9.25E-03	1.88E-04	-1.94E-03
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

Inventory flow indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Materials for recycling	kg	3.53E+00	8.12E-01	0.00E+00	1.65E-01	0.00E+00	2.56E+00	-6.56E-08
Materials for energy recovery	kg	9.50E-02	3.17E-03	0.00E+00	3.75E-02	0.00E+00	5.43E-02	0.00E+00
Exported energy	MJ by energy vector	2.44E-02	0.00E+00	0.00E+00	2.44E-02	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the product	kg of C.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the associated packaging	kg of C.	1.21E-01	1.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Environmental Impact Indicators: Optional

Optional Environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Emission of fine particles	incidence of diseases	1.30E-05	2.88E-06	4.81E-08	4.49E-09	9.85E-06	2.06E-07	-1.52E-06
Ionizing radiation, human health	kBq of U ²³⁵ eq.	8.62E+02	4.95E+02	2.28E-03	2.34E+01	3.43E+02	9.77E-01	-3.27E+02
Ecotoxicity, fresh water	CTUe	3.52E+03	2.84E+03	6.12E-01	2.79E+00	4.51E+02	2.24E+02	-2.16E+03
Human toxicity, cancer effects	CTUh	2.86E-06	2.80E-06	1.64E-11	1.79E-08	3.00E-08	7.87E-09	-1.56E-06
Human toxicity, non-cancer effects	CTUh	5.93E-06	4.61E-06	3.18E-10	6.51E-10	7.17E-07	6.11E-07	-2.84E-06
Impacts related to land use/soil quality	-	4.16E+01	1.18E+01	0.00E+00	6.04E-04	6.61E+00	2.32E+01	-2.62E+00
Total use of primary energy during the life cycle	MJ	8.42E+03	6.32E+02	1.31E+01	3.31E+00	7.62E+03	1.49E+02	-2.11E+02

To evaluate the environmental impact of other product covered by this PEP, multiply the impact figures by-

Factors for Manufacturing, Distribution, Installation, End-of-Life, and Module-D Phase:

Product Number	Description	Phases	GWP	GWP- f	GWP- b	GWP- lu	ODP	AP	Ep- fw	Ep- m	Ep-t	POCP	ADP- e	ADP- f	WDP
Y7-113280	NZMN2-4-VE250-SVE (Reference)	All Phase	1.00												
Y7-113388	NZMH2-4-VE100-SVE	All Phase	1.00												
Y7-113391	NZMH2-4-VE160/100- SVE	All Phase	1.00												
Y7-113390	NZMH2-4-VE160-SVE	All Phase	1.00												
Y7-113394	NZMH2-4-VE250/160- SVE	All Phase	1.00												
Y7-113393	NZMH2-4-VE250-SVE	All Phase	1.00												

Product Number	Description	Phases	GWP	GWP-f	GWP-b	GWP-lu	ODP	AP	Ep-fw	Ep-m	Ep-t	POCP	ADP-e	ADP-f	WDP
Y7-169027	NZML2-4-VE100-SVE	All Phase	1.00												
Y7-169029	NZML2-4-VE160/100-SVE	All Phase	1.00												
Y7-169028	NZML2-4-VE160-SVE	All Phase	1.00												
Y7-113275	NZMN2-4-VE100-SVE	All Phase	1.00												
Y7-113278	NZMN2-4-VE160/100-SVE	All Phase	1.00												
Y7-113277	NZMN2-4-VE160-SVE	All Phase	1.00												
Y7-113281	NZMN2-4-VE250/160-SVE	All Phase	1.00												
Y7-113320	NZMS2-4-VE100-SVE	All Phase	1.00												
Y7-113322	NZMS2-4-VE160/100-SVE	All Phase	1.00												
Y7-113321	NZMS2-4-VE160-SVE	All Phase	1.00												
Y7-113324	NZMS2-4-VE250/160-SVE	All Phase	1.00												
Y7-113323	NZMS2-4-VE250-SVE	All Phase	1.00												
Y7-113349	NZMH2-ME140-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113350	NZMH2-ME220-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113348	NZMH2-ME90-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113337	NZMH2-VE100-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113338	NZMH2-VE160-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113339	NZMH2-VE250-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18

Product Number	Description	Phases	GWP	GWP-f	GWP-b	GWP-lu	ODP	AP	Ep-fw	Ep-m	Ep-t	POCP	ADP-e	ADP-f	WDP
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-169026	NZML2-ME140-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-169025	NZML2-ME90-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-169023	NZML2-VE100-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-169024	NZML2-VE160-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113257	NZMN2-ME140-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113258	NZMN2-ME220-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113256	NZMN2-ME90-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113247	NZMN2-VE100-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76

Product Number	Description	Phases	GWP	GWP-f	GWP-b	GWP-lu	ODP	AP	Ep-fw	Ep-m	Ep-t	POCP	ADP-e	ADP-f	WDP
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113248	NZMN2-VE160-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113249	NZMN2-VE250-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113311	NZMS2-ME140-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113312	NZMS2-ME220-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113310	NZMS2-ME90-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113307	NZMS2-VE100-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113308	NZMS2-VE160-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66
Y7-113309	NZMS2-VE250-SVE	Manufacturing	1.32	1.30	4.14	0.76	1.69	2.58	0.48	1.35	1.35	1.69	1.01	1.25	2.18
		Distribution	0.76	0.76	1.00	1.00	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
		Installation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Product Number	Description	Phases	GWP	GWP-f	GWP-b	GWP-lu	ODP	AP	Ep-fw	Ep-m	Ep-t	POCP	ADP-e	ADP-f	WDP
		End of Life	0.86	0.88	0.46	0.45	0.54	0.65	0.45	0.82	0.69	0.77	0.45	1.27	0.93
		Module-D	0.91	0.93	0.37	0.76	0.93	0.53	0.88	0.84	0.81	0.72	0.72	0.88	0.66

Multiplying Factors for Use Phase for homogenous products:

Product Number	Product Description	Use Phase Extrapolation Factors
Y7-113280	NZMN2-4-VE250-SVE (Reference)	1.00
Y7-113388	NZMH2-4-VE100-SVE	0.16
Y7-113391	NZMH2-4-VE160/100-SVE	0.41
Y7-113390	NZMH2-4-VE160-SVE	0.41
Y7-113394	NZMH2-4-VE250/160-SVE	1.00
Y7-113393	NZMH2-4-VE250-SVE	1.00
Y7-169027	NZML2-4-VE100-SVE	0.16
Y7-169029	NZML2-4-VE160/100-SVE	0.41
Y7-169028	NZML2-4-VE160-SVE	0.41
Y7-113275	NZMN2-4-VE100-SVE	0.16
Y7-113278	NZMN2-4-VE160/100-SVE	0.41
Y7-113277	NZMN2-4-VE160-SVE	0.41
Y7-113281	NZMN2-4-VE250/160-SVE	1.00
Y7-113320	NZMS2-4-VE100-SVE	0.16
Y7-113322	NZMS2-4-VE160/100-SVE	0.41
Y7-113321	NZMS2-4-VE160-SVE	0.41
Y7-113324	NZMS2-4-VE250/160-SVE	1.00
Y7-113323	NZMS2-4-VE250-SVE	1.00
Y7-113349	NZMH2-ME140-SVE	0.31
Y7-113350	NZMH2-ME220-SVE	0.77
Y7-113348	NZMH2-ME90-SVE	0.13
Y7-113337	NZMH2-VE100-SVE	0.16
Y7-113338	NZMH2-VE160-SVE	0.41
Y7-113339	NZMH2-VE250-SVE	1.00
Y7-169026	NZML2-ME140-SVE	0.31
Y7-169025	NZML2-ME90-SVE	0.13
Y7-169023	NZML2-VE100-SVE	0.16
Y7-169024	NZML2-VE160-SVE	0.41
Y7-113257	NZMN2-ME140-SVE	0.31
Y7-113258	NZMN2-ME220-SVE	0.77
Y7-113256	NZMN2-ME90-SVE	0.13
Y7-113247	NZMN2-VE100-SVE	0.16
Y7-113248	NZMN2-VE160-SVE	0.41

Product Number	Product Description	Use Phase Extrapolation Factors
Y7-113249	NZMN2-VE250-SVE	1.00
Y7-113311	NZMS2-ME140-SVE	0.31
Y7-113312	NZMS2-ME220-SVE	0.77
Y7-113310	NZMS2-ME90-SVE	0.13
Y7-113307	NZMS2-VE100-SVE	0.16
Y7-113308	NZMS2-VE160-SVE	0.41
Y7-113309	NZMS2-VE250-SVE	1.00

Disclaimer

This Product Environmental Profile and its content is based on information available to us. It refers to the product at the date of issue. We make no express or implied representations or warranties with respect to the information contained herein.

Registration Number	EATO-00208-V01.01-EN	Drafting rules	PCR-ed4-EN-2021 09 06
Verifier accreditation Number	VH-56	Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Date of issue	10-2024	Information and reference documents	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025: 2006			
Internal	X	External	
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019			
The components of the present PEP may not be compared with components from any other program.			
Document complies with ISO 14025: 2006 « Environmental labels and declarations. Type III environmental declarations »			