



NZM3 Molded Case Circuit Breaker (IEC) with Thermo-Magnetic Trip Unit and Plug-in Technology

Representative product	NZMH3-4-A500-SVE (Y7-168893) Product Category: Circuit Breakers
Description of the product	Eaton Moeller series NZM3 molded case circuit breaker (IEC) with thermo-magnetic trip unit and plug-in technology 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 plug-in technique as mounting method.
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: C (Comfort), H (High), N (Normal) • Rated Current: 200 A, 250 A, 320 A, 400 A, 500A • Release: S (Short-circuit protection / motor protection with overload release, magnetic) • No. of Poles: 3, 4 • Mounting Method: SVE (Plug-in Unit)
Functional unit	“Protect the installation from overloads and short circuits in a circuit with rated voltage 690V, rated current 500A, with 4 poles, a rated breaking capacity 35 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	9.78E+00 Kg (With packaging)		
Category PEP Material	Material constituent	Mass (kg)	% Contribution
Metals	Steel	2.54E+00	25.9%
Plastics	Unsaturated polyester resin	2.06E+00	21.0%
Metals	Stainless steel	1.32E+00	13.5%
Metals	Copper	1.16E+00	11.9%
Plastics	Polycarbonate	1.08E+00	11.0%
Others	Cardboard	7.68E-01	7.9%
Plastics	Polyamide66	3.33E-01	3.4%
Plastics	Polypropylene	1.40E-01	1.4%
Others	Wood	1.17E-01	1.2%
Others	Paper	1.00E-01	1.2%
Plastics	Phenolic Resin	5.61E-02	1.0%
Metals	Silver	3.28E-02	0.6%
Plastics	Polybutylene Terephthalate GF30	2.92E-02	0.3%
Plastics	Polyamide66 GF30	2.55E-02	0.3%
Plastics	Silicone Rubber	6.00E-03	0.1%
Others	Miscellaneous	1.30E-02	0.1%
Total		9.78E+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 as substance listed as Substance-of-Very-High-Concern (SVHC) on the Candidate List of the EU-REACH Regulation (1907/2006/EC).

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 71.89% 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 130.5 W at full load condition. For Industrial applications considering 50% of the loading rate and 30% of the use time rate, total losses are 1714.77 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.	6.83E+02	5.99E+01	2.33E+00	2.71E+00	6.04E+02	1.34E+01	-2.56E+01
Climate change - fossil fuels (GWP-f)	kg CO ² eq.	6.81E+02	6.06E+01	2.33E+00	1.12E+00	6.03E+02	1.31E+01	-2.72E+01
Climate change – biogenics (GWP-b)	kg CO ² eq.	2.20E+00	-7.34E-01	0.00E+00	1.59E+00	1.11E+00	2.27E-01	1.59E+00
Climate change - land use and land use transformation (GWP-lu)	kg CO ² eq.	1.70E-03	1.69E-03	0.00E+00	0.00E+00	0.00E+00	3.75E-06	-1.37E-03
Ozone depletion (ODP)	kg eq. CFC-11	8.88E-06	5.71E-06	3.58E-09	3.44E-08	2.93E-06	2.04E-07	-3.26E-06
Acidification (AP)	mole of H ⁺ eq.	3.73E+00	5.42E-01	1.48E-02	3.53E-03	3.10E+00	6.83E-02	-2.82E-01
Freshwater eutrophication (EP-fw)	kg P eq.	1.19E-02	3.21E-03	8.75E-07	1.24E-05	1.59E-03	7.13E-03	-1.86E-04
Marine aquatic eutrophication (EP-m)	kg of N eq.	4.43E-01	4.70E-02	6.92E-03	1.38E-03	3.77E-01	9.97E-03	-1.83E-02
Terrestrial eutrophication (EP-t)	mole of N eq.	6.80E+00	5.39E-01	7.60E-02	9.76E-03	6.06E+00	1.18E-01	-1.98E-01
Photochemical ozone formation (POCP)	kg of NMVOC eq.	1.43E+00	1.85E-01	1.92E-02	2.38E-03	1.19E+00	3.70E-02	-7.82E-02
Depletion of abiotic resources – elements (ADPe)	kg eq. Sb	4.96E-02	4.92E-02	9.18E-08	7.65E-08	2.14E-04	2.30E-04	-1.95E-02
Depletion of abiotic resources - fossil fuels (ADP-f)	MJ	1.79E+04	1.76E+03	3.25E+01	1.02E+01	1.53E+04	8.23E+02	-6.87E+02
Water scarcity (WDP)	m ³ of eq.. deprivation worldwide	9.02E+01	3.35E+01	8.86E-03	2.36E-01	4.63E+01	1.01E+01	-1.94E+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	4.11E+03	6.09E+01	4.34E-02	4.15E+00	4.04E+03	8.84E+00	-1.35E+01
Use of renewable primary energy resources used as raw materials	MJ	1.81E+01	1.81E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.28E+01
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	4.13E+03	7.90E+01	4.34E-02	4.15E+00	4.04E+03	8.84E+00	-3.63E+01
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	MJ	1.78E+04	1.65E+03	3.25E+01	1.02E+01	1.53E+04	8.23E+02	-6.40E+02

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 non-renewable primary energy resources used as raw materials	MJ	1.05E+02	1.05E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-4.72E+01
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	1.79E+04	1.76E+03	3.25E+01	1.02E+01	1.53E+04	8.23E+02	-6.87E+02
Use of secondary materials	kg	0.00E+00	0.00E+00	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	2.11E+00	7.80E-01	2.06E-04	9.44E-03	1.09E+00	2.35E-01	-4.53E-01
Hazardous waste disposed of	kg	4.40E+02	4.05E+02	0.00E+00	6.54E-02	2.65E+01	8.88E+00	-2.40E+02
Non-hazardous waste disposed of	kg	1.38E+02	3.18E+01	8.19E-02	3.94E-01	1.02E+02	3.21E+00	-8.97E+00
Radioactive waste disposed of	kg	3.18E-02	7.80E-03	5.83E-05	5.85E-05	2.34E-02	4.26E-04	-4.77E-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
Materials for recycling	kg	9.60E+00	2.57E+00	0.00E+00	7.52E-01	0.00E+00	6.28E+00	-2.42E-07
Materials for energy recovery	kg	2.46E-01	6.44E-03	0.00E+00	1.17E-01	0.00E+00	1.23E-01	0.00E+00
Exported energy	MJ by energy vector	4.38E-02	0.00E+00	0.00E+00	4.38E-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.	4.28E-01	4.28E-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	3.13E-05	5.86E-06	1.20E-07	2.05E-08	2.49E-05	3.68E-07	-3.11E-06
Ionizing radiation, human health	kBq of U ²³⁵ eq.	1.41E+03	4.49E+02	5.68E-03	9.52E+01	8.69E+02	1.46E+00	-3.11E+02
Ecotoxicity, fresh water	CTUe	7.40E+03	6.02E+03	1.53E+00	1.36E+01	1.14E+03	2.19E+02	-5.34E+03
Human toxicity, cancer effects	CTUh	1.65E-05	1.63E-05	4.10E-11	9.25E-08	7.60E-08	8.50E-09	-9.83E-06
Human toxicity, non-cancer effects	CTUh	7.50E-06	5.05E-06	7.93E-10	3.05E-09	1.82E-06	6.33E-07	-3.16E-06
Impacts related to land use/soil quality	-	5.12E+01	1.31E+01	0.00E+00	2.88E-03	1.67E+01	2.13E+01	-3.88E+00
Total use of primary energy during the life cycle	MJ	2.20E+04	1.84E+03	3.26E+01	1.43E+01	1.93E+04	8.32E+02	-7.23E+02

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

Factors for Manufacturing, 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
Y7-168893	NZMH3-4-A500-SVE (Reference)	All Phase	1.00												
Y7-168465	NZMC3-4-A320/200-SVE	All Phase	1.00												
Y7-168464	NZMC3-4-A320-SVE	All Phase	1.00												
Y7-168467	NZMC3-4-A400/250-SVE	All Phase	1.00												
Y7-168466	NZMC3-4-A400-SVE	All Phase	1.00												
Y7-168469	NZMC3-4-A500/320-SVE	All Phase	1.00												
Y7-168468	NZMC3-4-A500-SVE	All Phase	1.00												
Y7-168890	NZMH3-4-A320/200-SVE	All Phase	1.00												
Y7-168889	NZMH3-4-A320-SVE	All Phase	1.00												
Y7-168892	NZMH3-4-A400/250-SVE	All Phase	1.00												
Y7-168891	NZMH3-4-A400-SVE	All Phase	1.00												
Y7-168894	NZMH3-4-A500/320-SVE	All Phase	1.00												
Y7-168509	NZMN3-4-A320/200-SVE	All Phase	1.00												
Y7-168508	NZMN3-4-A320-SVE	All Phase	1.00												
Y7-168511	NZMN3-4-A400/250-SVE	All Phase	1.00												
Y7-168510	NZMN3-4-A400-SVE	All Phase	1.00												
Y7-168513	NZMN3-4-A500/320-SVE	All Phase	1.00												
Y7-168512	NZMN3-4-A500-SVE	All Phase	1.00												
Y7-168450	NZMC3-A320-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168451	NZMC3-A400-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168452	NZMC3-A500-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73

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
Y7-168453	NZMC3-S250-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168454	NZMC3-S320-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168455	NZMC3-S400-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168456	NZMC3-S500-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168913	NZMH3-A320-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168914	NZMH3-A400-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168915	NZMH3-A500-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168916	NZMH3-S250-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59

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
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168917	NZMH3-S320-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168918	NZMH3-S400-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168919	NZMH3-S500-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168486	NZMN3-A320-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168487	NZMN3-A400-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168488	NZMN3-A500-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168489	NZMN3-S250-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168490	NZMN3-S320-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	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
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168491	NZMN3-S400-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73
Y7-168492	NZMN3-S500-SVE	Manufacturing	0.72	0.73	1.04	0.75	0.86	0.75	0.76	0.74	0.74	0.74	0.76	0.69	0.76
		Distribution	0.74	0.74	1.00	1.00	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
		Installation	0.95	0.97	0.94	1.00	0.63	0.87	0.97	0.95	0.93	0.91	0.73	0.93	0.59
		EOL	0.68	0.68	0.75	0.75	0.74	0.70	0.75	0.70	0.70	0.69	0.75	0.66	0.71
		Module - D	0.72	0.71	0.43	0.76	0.83	0.74	0.76	0.71	0.70	0.71	0.76	0.66	0.73

Multiplying Factors for Use Phase and Distribution Phase for homogenous products:

Product Number	Description	Use Phase Extrapolation Factors
Y7-168893	NZMH3-4-A500-SVE (Reference)	1.00
Y7-168465	NZMC3-4-A320/200-SVE	0.72
Y7-168464	NZMC3-4-A320-SVE	0.72
Y7-168467	NZMC3-4-A400/250-SVE	0.74
Y7-168466	NZMC3-4-A400-SVE	0.74
Y7-168469	NZMC3-4-A500/320-SVE	1.00
Y7-168468	NZMC3-4-A500-SVE	1.00
Y7-168890	NZMH3-4-A320/200-SVE	0.72
Y7-168889	NZMH3-4-A320-SVE	0.72
Y7-168892	NZMH3-4-A400/250-SVE	0.74
Y7-168891	NZMH3-4-A400-SVE	0.74
Y7-168894	NZMH3-4-A500/320-SVE	1.00
Y7-168509	NZMN3-4-A320/200-SVE	0.72
Y7-168508	NZMN3-4-A320-SVE	0.72
Y7-168450	NZMC3-A320-SVE	0.60
Y7-168451	NZMC3-A400-SVE	0.56
Y7-168452	NZMC3-A500-SVE	0.71
Y7-168453	NZMC3-S250-SVE	0.52
Y7-168454	NZMC3-S320-SVE	0.60

Product Number	Description	Use Phase Extrapolation Factors
Y7-168455	NZMC3-S400-SVE	0.56
Y7-168456	NZMC3-S500-SVE	0.71
Y7-168913	NZMH3-A320-SVE	0.60
Y7-168914	NZMH3-A400-SVE	0.56
Y7-168915	NZMH3-A500-SVE	0.71
Y7-168916	NZMH3-S250-SVE	0.52
Y7-168917	NZMH3-S320-SVE	0.60
Y7-168918	NZMH3-S400-SVE	0.56
Y7-168919	NZMH3-S500-SVE	0.71
Y7-168486	NZMN3-A320-SVE	0.60
Y7-168487	NZMN3-A400-SVE	0.56
Y7-168488	NZMN3-A500-SVE	0.71
Y7-168489	NZMN3-S250-SVE	0.52
Y7-168490	NZMN3-S320-SVE	0.60
Y7-168491	NZMN3-S400-SVE	0.56
Y7-168492	NZMN3-S500-SVE	0.71
Y7-168511	NZMN3-4-A400/250-SVE	0.74
Y7-168510	NZMN3-4-A400-SVE	0.74
Y7-168513	NZMN3-4-A500/320-SVE	1.00
Y7-168512	NZMN3-4-A500-SVE	1.00

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Registration Number	EATO-00231-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	11-2024	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 »			