

 <i>Powering Business Worldwide</i>	Product Environmental Profile	
---	--	---

	NZM3 Molded Case Circuit Breaker (IEC) with thermo-magnetic Trip Unit, STD technology and with or without Box Terminals
---	--

Representative product	NZMH3-A500 (Y7-109675) Product Category: Circuit Breakers
Description of the product	Eaton Moeller series NZM molded case circuit breaker thermo-magnetic trip unit are designed to provide circuit protection for low-voltage distribution systems. The NZM circuit breakers protect entire systems and cables across all levels, from the main distribution board all the way to the load itself.
Homogeneous Environmental Families Covered	The PEP concerns following product offerings from Eaton Moeller series NZM molded case circuit breaker thermo-magnetic trip unit as mentioned below: • Series: NZM Circuit Breaker • Switching Capacity: C (Comfort), H (High), N (Normal), S (Strong) • Rated Current: 250A, 320A, 400A, 500A. • Release: A (System protection, thermo-magnetic), S (Short-circuit protection / motor protection with overload release, magnetic) • No. of Poles: 3, 4 • Type of Terminal: With or Without Box Terminal (BT)
Functional unit	‘Protect the installation from overloads and short circuits in a circuit with rated voltage 690V, rated current 500A, with 3 poles, a rated breaking capacity 35kA, with 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	6.24E+00 Kg (With packaging)		
Category PEP Material	Material constituent	Mass (kg)	% Contribution
Plastics	Unsaturated polyester resin	1.58E+00	25.3%
Metals	Steel	1.17E+00	18.7%
Metals	Copper	1.17E+00	18.7%
Plastics	Polycarbonate	8.51E-01	13.6%
Metals	Stainless Steel	4.95E-01	7.9%
Others	Carton	4.08E-01	6.5%
Plastics	Polyamide 66 with Glass-Fibre 30%	2.28E-01	3.6%
Others	Wood	1.17E-01	1.9%
Plastics	Polyamide 66	7.28E-02	1.2%
Plastics	Phenolic Resin	4.41E-02	0.7%
Metals	Silver	3.29E-02	0.5%
Plastics	Polybutylene terephthalate	1.94E-02	0.3%
Others	Paper	1.90E-02	0.3%
Metals	Ferronickel	1.89E-02	0.3%
Plastics	Glass Fibre	8.63E-03	0.1%
Others	Miscellaneous	1.52E-02	0.2%
Total		6.24E+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 91% 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 v6.2.2 with database version CODDE-2024-04. 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 93 W at full load condition. For Industrial applications considering 50% of the loading rate and 30% of the use time rate, total losses are 1222.020 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.	4.58E+02	3.67E+01	1.49E+00	1.48E+00	4.11E+02	8.25E+00	-2.06E+01
Climate change - fossil fuels (GWP-f)	kg CO ₂ eq.	4.57E+02	3.69E+01	1.49E+00	6.08E-01	4.10E+02	8.02E+00	-2.08E+01
Climate change - biogenics (GWP-b)	kg CO ₂ eq.	1.64E+00	-2.17E-01	0.00E+00	8.74E-01	7.55E-01	2.28E-01	2.02E-01
Climate change - land use and land use transformation (GWP-lu)	kg CO ₂ eq.	1.18E-03	1.18E-03	0.00E+00	0.00E+00	0.00E+00	3.76E-06	-1.08E-03
Ozone depletion (ODP)	kg eq. CFC-11	6.70E-06	4.51E-06	2.28E-09	1.16E-08	1.99E-06	1.92E-07	-2.23E-06
Acidification (AP)	mole of H ⁺ eq.	2.60E+00	4.35E-01	9.43E-03	1.76E-03	2.10E+00	5.13E-02	-2.60E-01
Freshwater eutrophication (Ep-fw)	kg P eq.	1.11E-02	2.92E-03	5.59E-07	7.37E-06	1.08E-03	7.08E-03	-1.02E-04

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.	3.01E-01	3.33E-02	4.42E-03	6.75E-04	2.56E-01	6.75E-03	-1.61E-02
Terrestrial eutrophication (Ep-t)	mole of N eq.	4.60E+00	3.47E-01	4.85E-02	5.28E-03	4.12E+00	8.39E-02	-1.54E-01
Photochemical ozone formation (POCP)	kg of NMVOC eq.	9.74E-01	1.30E-01	1.22E-02	1.26E-03	8.06E-01	2.36E-02	-6.47E-02
Depletion of abiotic resources - elements (ADP-e)	kg eq. Sb	1.10E-01	1.09E-01	5.86E-08	3.00E-08	1.45E-04	2.30E-04	-8.03E-02
Depletion of abiotic resources - fossil fuels (ADP-f)	MJ	1.18E+04	1.01E+03	2.08E+01	5.41E+00	1.04E+04	3.94E+02	-5.14E+02
Water scarcity (WDP)	m³ eq. deprivation worldwide	6.59E+01	2.64E+01	5.66E-03	7.12E-02	3.14E+01	7.91E+00	-1.57E+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	2.80E+03	4.27E+01	2.77E-02	1.12E+00	2.74E+03	1.10E+01	-1.34E+01
Use of renewable primary energy resources used as raw materials	MJ	1.06E+01	1.06E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.97E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	2.81E+03	5.33E+01	2.77E-02	1.12E+00	2.74E+03	1.10E+01	-2.04E+01
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	MJ	1.17E+04	9.30E+02	2.08E+01	5.41E+00	1.04E+04	3.94E+02	-4.45E+02
Use of non-renewable primary energy resources used as raw materials	MJ	7.75E+01	7.75E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.91E+01
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	1.18E+04	1.01E+03	2.08E+01	5.41E+00	1.04E+04	3.94E+02	-5.14E+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 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	m ³	1.54E+00	6.16E-01	1.32E-04	3.77E-03	7.39E-01	1.84E-01	-3.66E-01
Hazardous waste disposed of	kg	3.67E+02	3.43E+02	0.00E+00	5.35E-02	1.80E+01	5.75E+00	-2.15E+02
Non-hazardous waste disposed of	kg	8.59E+01	1.50E+01	5.23E-02	2.30E-01	6.93E+01	1.36E+00	-7.46E+00
Radioactive waste disposed of	kg	2.22E-02	5.70E-03	3.72E-05	3.42E-05	1.59E-02	5.59E-04	-3.66E-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	7.08E+00	1.42E+00	0.00E+00	3.53E-01	0.00E+00	5.30E+00	-2.07E-07
Materials for energy recovery	kg	1.48E-01	4.91E-03	0.00E+00	1.12E-01	0.00E+00	3.12E-02	0.00E+00
Exported energy	MJ by energy vector	6.08E-02	3.93E-05	0.00E+00	6.07E-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.	2.29E-01	2.29E-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	2.10E-05	3.64E-06	7.67E-08	1.05E-08	1.69E-05	2.91E-07	-2.18E-06
Ionizing radiation, human health	kBq U ²³⁵ eq.	1.05E+03	4.44E+02	3.63E-03	1.81E+01	5.90E+02	2.07E+00	-3.06E+02
Ecotoxicity, fresh water	CTUe	2.71E+03	1.71E+03	9.76E-01	6.94E+00	7.76E+02	2.16E+02	-1.42E+03
Human toxicity, cancer effects	CTUh	7.26E-06	7.15E-06	2.62E-11	4.92E-08	5.16E-08	8.92E-09	-4.29E-06
Human toxicity, non- cancer effects	CTUh	6.47E-06	4.65E-06	5.06E-10	1.59E-09	1.23E-06	5.86E-07	-2.97E-06
Impacts related to land use/soil quality	-	4.44E+01	1.17E+01	0.00E+00	1.88E-03	1.14E+01	2.14E+01	-3.01E+00
Total use of primary energy during the life cycle	MJ	1.46E+04	1.06E+03	2.08E+01	6.53E+00	1.31E+04	4.05E+02	-5.34E+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	Product Description	Phases	GWP	GWP-f	GWP-b	GWP-lu	ODP	AP	Ep-fw	Ep-m	Ep-t	POCP	ADP-e	ADP-f	WDP
Y7-109675	NZMH3-A500 (Reference)	All Phases	1.00												
Y7-109669	NZMN3-A320	All Phases	1.00												
Y7-109670	NZMN3-A400	All Phases	1.00												
Y7-192024	NZMS3-A320	All Phases	1.00												
Y7-192025	NZMS3-A400	All Phases	1.00												
Y7-109668	NZMN3-A250	All Phases	1.00												
Y7-192023	NZMS3-A250	All Phases	1.00												
Y7-192026	NZMS3-A500	All Phases	1.00												
Y7-109664	NZMC3-A250	All Phases	1.00												
Y7-109665	NZMC3-A320	All Phases	1.00												
Y7-109666	NZMC3-A400	All Phases	1.00												
Y7-109667	NZMC3-A500	All Phases	1.00												
Y7-109676	NZMC3-S250	All Phases	1.00												
Y7-109677	NZMC3-S320	All Phases	1.00												
Y7-109678	NZMC3-S400	All Phases	1.00												
Y7-109679	NZMC3-S500	All Phases	1.00												
Y7-109672	NZMH3-A250	All Phases	1.00												
Y7-109673	NZMH3-A320	All Phases	1.00												
Y7-109674	NZMH3-A400	All Phases	1.00												
Y7-109684	NZMH3-S250	All Phases	1.00												
Y7-109685	NZMH3-S320	All Phases	1.00												
Y7-109686	NZMH3-S400	All Phases	1.00												
Y7-109687	NZMH3-S500	All Phases	1.00												
Y7-109671	NZMN3-A500	All Phases	1.00												
Y7-109680	NZMN3-S250	All Phases	1.00												
Y7-109681	NZMN3-S320	All Phases	1.00												
Y7-109682	NZMN3-S400	All Phases	1.00												
Y7-109683	NZMN3-S500	All Phases	1.00												
Y7-110305	NZMH3-A320-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110306	NZMH3-A400-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110302	NZMN3-A320-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110303	NZMN3-A400-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110299	NZMC3-A320-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110300	NZMC3-A400-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	Product 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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-174618	NZMN3-A250-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110307	NZMH3-A500-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110304	NZMN3-A500-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-110301	NZMC3-A500-BT	Manufacturing	1.11	1.11	0.99	1.00	1.06	1.03	1.00	1.06	1.07	1.07	1.00	1.21	1.05
		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	1.16	1.17	1.00	1.00	1.02	1.09	1.00	1.12	1.11	1.14	1.00	1.27	1.07
		Module-D	1.09	1.09	1.00	1.00	1.07	1.02	0.96	1.05	1.06	1.05	1.00	1.18	1.04
Y7-109696	NZMN3-4-A400	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109694	NZMN3-4-A320	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109688	NZMC3-4-A320	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109689	NZMC3-4-A320/200	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109690	NZMC3-4-A400	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109691	NZMC3-4-A400/250	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109692	NZMC3-4-A500	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109693	NZMC3-4-A500/320	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109700	NZMH3-4-A320	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109701		Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28

Product Number	Product Description	Phases	GWP	GWP-f	GWP-b	GWP-lu	ODP	AP	Ep-fw	Ep-m	Ep-t	POCP	ADP-e	ADP-f	WDP
	NZMH3-4-A320/200	Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109702	NZMH3-4-A400	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109703	NZMH3-4-A400/250	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109704	NZMH3-4-A500	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109705	NZMH3-4-A500/320	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-158260	NZMN3-4-A250	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109695	NZMN3-4-A320/200	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109697	NZMN3-4-A400/250	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109698	NZMN3-4-A500	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28
Y7-109699	NZMN3-4-A500/320	Manufacturing	1.29	1.28	0.47	1.33	1.25	1.32	1.33	1.30	1.29	1.30	1.31	1.29	1.28
		Installation	1.09	1.10	1.09	1.00	1.07	1.10	1.11	1.11	1.10	1.10	1.08	1.10	1.06
		End of Life	1.29	1.29	1.33	1.33	1.32	1.31	1.33	1.30	1.30	1.30	1.33	1.27	1.32
		Module-D	1.29	1.28	0.71	1.33	1.31	1.32	1.30	1.29	1.28	1.29	1.31	1.30	1.28

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

Part Number	Product Description	Use Phase Extrapolation Factors	Distribution Phase Extrapolation Factors
Y7-109675	NZMH3-A500 (Reference)	1.00	1.00
Y7-109669	NZMN3-A320	0.85	1.00
Y7-109670	NZMN3-A400	0.78	1.00
Y7-192024	NZMS3-A320	0.20	1.00
Y7-192025	NZMS3-A400	0.52	1.00
Y7-109668	NZMN3-A250	0.73	1.00
Y7-192023	NZMS3-A250	0.55	1.00
Y7-192026	NZMS3-A500	1.28	1.00

Part Number	Product Description	Use Phase Extrapolation Factors	Distribution Phase Extrapolation Factors
Y7-109664	NZMC3-A250	0.73	1.00
Y7-109665	NZMC3-A320	0.85	1.00
Y7-109666	NZMC3-A400	0.78	1.00
Y7-109667	NZMC3-A500	1.00	1.00
Y7-109676	NZMC3-S250	0.73	1.00
Y7-109677	NZMC3-S320	0.85	1.00
Y7-109678	NZMC3-S400	0.78	1.00
Y7-109679	NZMC3-S500	1.00	1.00
Y7-109672	NZMH3-A250	0.73	1.00
Y7-109673	NZMH3-A320	0.85	1.00
Y7-109674	NZMH3-A400	0.78	1.00
Y7-109684	NZMH3-S250	0.73	1.00
Y7-109685	NZMH3-S320	0.85	1.00
Y7-109686	NZMH3-S400	0.78	1.00
Y7-109687	NZMH3-S500	1.00	1.00
Y7-109671	NZMN3-A500	1.00	1.00
Y7-109680	NZMN3-S250	0.73	1.00
Y7-109681	NZMN3-S320	0.85	1.00
Y7-109682	NZMN3-S400	0.78	1.00
Y7-109683	NZMN3-S500	1.00	1.00
Y7-110305	NZMH3-A320-BT	0.85	1.08
Y7-110306	NZMH3-A400-BT	0.78	1.08
Y7-110302	NZMN3-A320-BT	0.85	1.08
Y7-110303	NZMN3-A400-BT	0.78	1.08
Y7-110299	NZMC3-A320-BT	0.85	1.08
Y7-110300	NZMC3-A400-BT	0.78	1.08
Y7-174618	NZMN3-A250-BT	0.55	1.08
Y7-110307	NZMH3-A500-BT	1.00	1.08
Y7-110304	NZMN3-A500-BT	1.00	1.08
Y7-110301	NZMC3-A500-BT	1.00	1.08
Y7-109696	NZMN3-4-A400	1.04	1.28
Y7-109694	NZMN3-4-A320	1.01	1.28
Y7-109688	NZMC3-4-A320	1.01	1.28
Y7-109689	NZMC3-4-A320/200	1.01	1.28
Y7-109690	NZMC3-4-A400	1.04	1.28
Y7-109691	NZMC3-4-A400/250	1.04	1.28
Y7-109692	NZMC3-4-A500	1.40	1.28
Y7-109693	NZMC3-4-A500/320	1.40	1.28
Y7-109700	NZMH3-4-A320	1.01	1.28
Y7-109701	NZMH3-4-A320/200	1.01	1.28
Y7-109702	NZMH3-4-A400	1.04	1.28
Y7-109703	NZMH3-4-A400/250	1.04	1.28
Y7-109704	NZMH3-4-A500	1.40	1.28

Part Number	Product Description	Use Phase Extrapolation Factors	Distribution Phase Extrapolation Factors
Y7-109705	NZMH3-4-A500/320	1.40	1.28
Y7-158260	NZMN3-4-A250	0.20	1.28
Y7-109695	NZMN3-4-A320/200	1.01	1.28
Y7-109697	NZMN3-4-A400/250	1.04	1.28
Y7-109698	NZMN3-4-A500	1.40	1.28
Y7-109699	NZMN3-4-A500/320	1.40	1.28

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-00184-V01.01-EN	Drafting rules	PCR-ed4-EN-2021 09 06
Verifier accreditation Number	VH53	Supplemented by	PSR-0005-ed3.1-EN-2023 08 12
Date of issue	08-2024	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 »			