

# Product Environmental Profile

## ADJUSTABLE DELAY UNIT MNR 200/250 VAC/DC

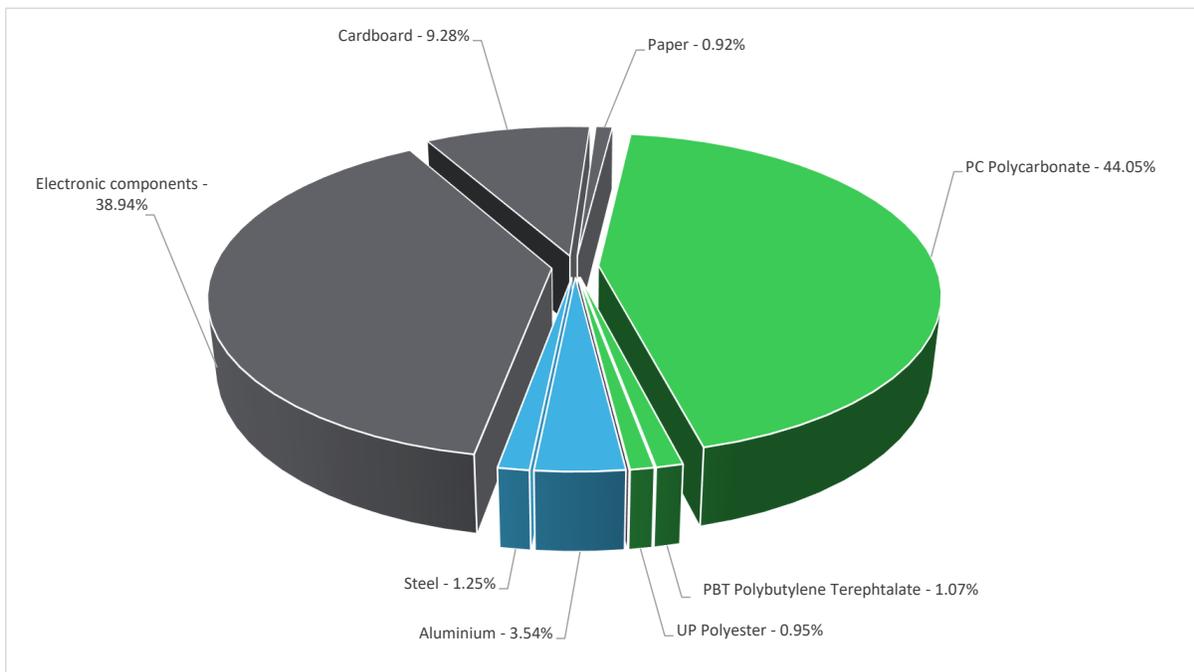


## General information

Reference product	ADJUSTABLE DELAY UNIT MNR 200/250 VAC/DC - LV833682SP
Description of the product	MN delay unit (MNR) retarders for auxiliaries are intended to perform delayed opening functions circuit breakers by MN triggers. It always associated with a MN, this set corresponds to the trigger with minimum voltage delayed. It delays the opening action of the circuit breaker when the input voltage drops to a value between 30% and 60% of its nominal voltage.  Adjustable Version with Electro-mechanical Rotary Switch for setting time with 4 delay as 0.5s, 1s, 1.5s, and 3s
Functional unit	Time-delay unit eliminates nuisance tripping of an undervoltage trip release due to transient voltage dips lasting < 200 ms, during 10 years.

## Constituent materials

Reference product mass	199.313 g including the product, its packaging and additional elements and accessories
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Plastics	46.1%
Metals	4.8%
Others	49.1%

## Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website  
<https://www.se.com/ww/en/work/support/green-premium/>

## Additional environmental information

End Of Life	Recyclability potential:	6%	Recyclability rate has been calculated based on REEECYLAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).
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**Environmental impacts**

Reference service life time	10 years			
Product category	Other equipments - Active product			
Installation elements	No special components needed			
Use scenario	ADJUSTABLE DELAY UNIT MNR 200/250 VAC/DC will be in Active phase 0.00095% with 4.5 W power consumption and in Sleep mode 99.99905% during 10 years of lifetime.			
Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production.			
Geographical representativeness	Europe			
Energy model used	[A1 - A3]	[A5]	[B6]	[C1 - C4]
	Electricity Mix; Production mix; Low voltage; FR	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27	Electricity Mix; Production mix; Low voltage; UE-27

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

Mandatory Indicators		ADJUSTABLE DELAY UNIT MNR 200/250 VAC/DC - LV833682SP						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	Loads and Benefits
			[A1 - A3]	[A4]	[A5]	[B1 - B7]	[C1 - C4]	[D]
Contribution to climate change	kg CO2 eq	4.27E+00	3.81E+00	2.61E-02	3.47E-02	1.53E-03	4.01E-01	-1.24E-01
Contribution to climate change-fossil	kg CO2 eq	4.25E+00	3.80E+00	2.61E-02	3.31E-02	1.53E-03	3.93E-01	-1.21E-01
Contribution to climate change-biogenic	kg CO2 eq	2.26E-02	1.36E-02	0*	1.54E-03	0*	7.46E-03	-3.01E-03
Contribution to climate change-land use and land use change	kg CO2 eq	4.69E-09	4.69E-09	0*	0*	0*	0*	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	1.13E-06	1.12E-06	0*	2.30E-09	0*	1.05E-08	-1.52E-08
Contribution to acidification	mol H+ eq	2.02E-02	1.61E-02	1.68E-04	1.38E-04	8.76E-06	3.81E-03	-7.65E-04
Contribution to eutrophication, freshwater	kg (PO4) <sup>3-</sup> eq	1.33E-05	1.04E-05	9.76E-09	2.51E-07	4.20E-09	2.60E-06	-5.43E-07
Contribution to eutrophication marine	kg N eq	5.32E-03	2.50E-03	7.87E-05	3.65E-05	9.95E-07	2.70E-03	-7.78E-05
Contribution to eutrophication, terrestrial	mol N eq	2.85E-02	2.59E-02	8.64E-04	2.75E-04	1.50E-05	1.49E-03	-8.04E-04
Contribution to photochemical ozone formation - human health	kg COVNM eq	9.24E-03	8.38E-03	2.18E-04	7.35E-05	3.19E-06	5.70E-04	-2.57E-04
Contribution to resource use, minerals and metals	kg Sb eq	4.37E-04	4.37E-04	0*	0*	0*	0*	-3.01E-06
Contribution to resource use, fossils	MJ	7.05E+01	6.76E+01	3.63E-01	3.61E-01	3.91E-02	2.13E+00	-1.64E+00
Contribution to water use	m3 eq	4.96E+01	1.46E+00	0*	1.48E-02	0*	4.81E+01	-3.13E-02

Additional indicators for the French regulation are available as well

Inventory flows Indicators			ADJUSTABLE DELAY UNIT MNR 200/250 VAC/DC - LV833682SP					
Inventory flows	Unit	Total	Manufact. [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Loads and Benefits [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.29E+00	2.04E+00	4.85E-04	2.59E-02	7.51E-03	2.12E-01	1.65E-02
Contribution to use of renewable primary energy resources used as raw material	MJ	1.10E-01	1.10E-01	0*	0*	0*	0*	-1.24E-01
Contribution to total use of renewable primary energy resources	MJ	2.40E+00	2.15E+00	4.85E-04	2.59E-02	7.51E-03	2.12E-01	-1.08E-01
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	6.74E+01	6.45E+01	3.63E-01	3.61E-01	3.91E-02	2.13E+00	-1.64E+00
Contribution to use of non renewable primary energy resources used as raw material	MJ	3.10E+00	3.10E+00	0*	0*	0*	0*	0.00E+00
Contribution to total use of non-renewable primary energy resources	MJ	7.05E+01	6.76E+01	3.63E-01	3.61E-01	3.91E-02	2.13E+00	-1.64E+00
Contribution to use of secondary material	kg	1.63E-02	1.63E-02	0*	0*	0*	0*	0.00E+00
Contribution to use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to net use of freshwater	m³	1.29E+00	3.40E-02	0*	3.45E-04	0*	1.26E+00	-7.29E-04
Contribution to hazardous waste disposed	kg	4.40E+00	4.22E+00	0*	0*	0*	1.81E-01	-2.44E-01
Contribution to non hazardous waste disposed	kg	2.14E+00	1.92E+00	9.14E-04	1.13E-01	2.21E-04	1.04E-01	-3.64E-01
Contribution to radioactive waste disposed	kg	1.13E-02	1.13E-02	0*	1.51E-05	0*	5.42E-06	-1.43E-04
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	2.97E-02	0*	0*	1.91E-02	0*	1.06E-02	0.00E+00
Contribution to materials for energy recovery	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to exported energy	MJ	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the product	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to biogenic carbon content of the associated packaging	kg de C	0.00E+00	0*	0*	0*	0*	0*	0.00E+00

\* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - <http://www.schneider-electric.com/contact>

For all the impact indicators, The Manufacturing phase has the greatest impacts contribution on the majority of environmental indicators, except for Eutrophication marine(Epm) and Water use(WU) stage. The End Of Life stage is the main contributor on Eutrophication marine(Epm) and Water use(WU) stage.

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

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Verifier accreditation N°	VH08	Supplemented by Information and reference documents	PSR-0005-ed2-2016 03 29
Date of issue	11/2023	Validity period	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010		5 years	
Internal External X			
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 elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »			



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