# **Product Environmental Profile**

#### **Resi9 Connect Communication Cabinet**

as referent product for : all Cabinets in Resi9 CONNECT BASIC range







### General information

Reference product	Resi9 Connect Communication Cabinet - VDIRM0036
Description of the product	Resi9 connect basic product is a network / communication cabinet for residential purpose aiming to distribute communication signals (Phone, IP Data, TV, SAT, IPTV, LAN) to farthest corner of the house, safely and without interference.  As central point, the network / communication cabinet can embed the ISP router to dispatch any IP Data (VoIP, IPTV, LAN) to RJ45 communication sockets on wall.
Description of the range	The indicators values of this Resi9 connect basic network / communication cabinet can be extrapolated, based on the Mass and Energy values of the products, for other similar products in the range.
Functional unit	Distribute communication signals (Phone, IP Data, TV, SAT) from one end to other end of home with IK08 degrees of protection against external mechanical impacts in accordance with the standard IEC 62262. Compatible with Grade2TV cabling system according to NFC 15-100 and NFC 90483 standards with the following dimension 500mm x 108mm x 252mm during the reference service life of 20 years.

## Constituent materials

2300 g including the product, its packaging and additional elements and accessories Acrylonitrile Butadiene Styrene - 1.54% Polyamide - 5.42% Polyethylene - 0.77% Polycarbonate - 7.64% Steel - 9.61% Polyvinyl chloride - 7.9% Copper - 8.54% Zinc - 4.48% Aluminium - 3.94% Bronze - 0.6% Zamak - 0.6% Polystyrene - 32.52% Cardboard - 14.25% \_ Electronic components - 1.32% Various - 0.43% \_ Miscellaneous - 0.44% **Plastics** 55.8%

 Plastics
 55.8%

 Metals
 27.8%

 Others
 16.4%

#### Substance assessment

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

### (19) Additional environmental information

End Of Life	Recyclability potential:	70%	The recyclability rate was calculated from the recycling rates of each material making up the product with the exception of data using the ESR database. For materials or components using the ESR database or the absence of data the conservative hypothesis "0% recyclability" was used.
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### Environmental impacts

Reference service life time	20 years										
Product category	Combinations of functions										
Installation elements	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted during the installation phase (including transport to disposal).										
Use scenario	The power consumption for active part is 0.07W at use rate of 40% in active mode and 0.037W at use rate of 60% in standby mode for 20 years.  Passive product continuous operation scenario, products through which the main current passes during continuous operation.  The power dissipation at 100% load rate is 0.275W.  Load rate / rated current (ln): 30% ln  Use time rate: 100 %										
Replacement	As per PSR0005 the reference lifetime (RLT) of the product with Electronic component is 10 years, so DTI with cable of 71.23g has to be changed for every 10 years due to electronic components (PCBA).										
Time representativeness	The collected data are representative of the year 2023										
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										
	[A1 - A3]	[A5]	[B6]	[C1 - C4]							
Energy model used	Electricity Mix; High voltage; 2018; France, FR	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27	Electricity Mix; Low voltage; 2018; Europe, EU-27							

Detailed results of the optional indicators mentioned in PCRed4 are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneiderelectric.com/contact

Mandatory Indicators		Re	si9 Connect Co	mmunication Ca	binet - VDIRM003	5		
Impact indicators	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to climate change	kg CO2 eq	2.35E+01	1.33E+01	1.07E+00	3.70E-01	6.15E+00	2.70E+00	-3.01E+00
Contribution to climate change-fossil	kg CO2 eq	2.33E+01	1.30E+01	1.07E+00	3.53E-01	6.14E+00	2.66E+00	-2.89E+00
Contribution to climate change-biogenic	kg CO2 eq	2.88E-01	2.10E-01	0*	1.70E-02	1.46E-02	4.60E-02	-1.21E-01
Contribution to climate change-land use and land use change-	ge kg CO2 eq	2.23E-04	2.15E-04	0*	0*	3.27E-06	4.87E-06	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	2.61E-06	1.50E-06	9.42E-07	4.81E-09	9.85E-08	5.80E-08	-4.44E-07
Contribution to acidification	mol H+ eq	1.53E-01	1.00E-01	4.64E-03	1.05E-03	3.67E-02	1.07E-02	-4.84E-02
Contribution to eutrophication, freshwater	kg (PO4)³- eq	1.65E-03	3.00E-04	0*	8.36E-06	1.95E-05	1.32E-03	-1.24E-05
Contribution to eutrophication marine	kg N eq	1.94E-02	1.03E-02	2.13E-03	4.58E-04	4.09E-03	2.40E-03	-2.24E-03
Contribution to eutrophication, terrestrial	mol N eq	2.23E-01	1.10E-01	2.31E-02	3.19E-03	5.89E-02	2.75E-02	-2.38E-02
Contribution to photochemical ozone formation - human health	kg COVNM eq	6.73E-02	3.81E-02	7.57E-03	7.32E-04	1.35E-02	7.44E-03	-9.48E-03
Contribution to resource use, minerals and metals	kg Sb eq	5.53E-04	4.52E-04	0*	0*	5.96E-05	4.11E-05	-5.34E-04
Contribution to resource use, fossils	MJ	5.20E+02	2.90E+02	1.33E+01	3.56E+00	1.51E+02	6.12E+01	-4.85E+01
Contribution to water use	m3 eq	1.08E+01	7.62E+00	5.42E-02	3.64E-02	5.46E-01	2.52E+00	-2.25E+00

Inventory flows Indicators	Resi9 Connect Communication Cabinet - VDIRM0036							
Inventory flows	Unit	Total (without Module D)	[A1 - A3] - Manufacturing	[A4] - Distribution	[A5] - Installation	[B1 - B7] - Use	[C1 - C4] - End of life	[D] - Benefits and loads
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3.40E+01	5.81E+00	0*	4.67E-01	2.65E+01	1.21E+00	-6.54E-01
Contribution to use of renewable primary energy resources used as raw material	MJ	7.00E+00	6.94E+00	0*	0*	5.86E-02	0*	-4.95E+00
Contribution to total use of renewable primary energy resources	MJ	4.10E+01	1.28E+01	0*	4.67E-01	2.66E+01	1.21E+00	-5.61E+00
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.62E+02	2.35E+02	1.33E+01	3.56E+00	1.49E+02	6.12E+01	-4.83E+01
Contribution to use of non renewable primary energy resources used as raw material	MJ	5.77E+01	5.54E+01	0*	0*	2.34E+00	0*	-1.69E-01
Contribution to total use of non-renewable primary energy resources	MJ	5.20E+02	2.90E+02	1.33E+01	3.56E+00	1.51E+02	6.12E+01	-4.85E+01
Contribution to use of secondary material	kg	2.00E-05	1.00E-05	0*	0*	1.00E-05	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	2.54E-01	1.80E-01	1.26E-03	8.47E-04	1.28E-02	5.88E-02	-5.24E-02
Contribution to hazardous waste disposed	kg	3.14E+01	3.11E+01	0*	8.94E-03	2.95E-01	1.45E-02	-4.56E+01
Contribution to non hazardous waste disposed	kg	2.10E+01	1.87E+01	0*	1.59E-01	1.09E+00	9.85E-01	-3.09E+00
Contribution to radioactive waste disposed	kg	7.37E-03	6.67E-03	2.12E-04	1.96E-05	3.59E-04	1.06E-04	-2.16E-03
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.38E+00	9.76E-02	0*	3.59E-03	2.72E-04	1.28E+00	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	8.30E-02	1.00E-03	0*	1.46E-02	0*	6.74E-02	0.00E+00

<sup>\*</sup> represents less than 0.01% of the total life cycle of the reference flow

Mandatory Indicators				Resi9 C	onnect Co	ommunicat	ion Cabi	net - VDIRM003	36
Impact indicators	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to climate change	kg CO2 eq	6.15E+00	0*	0*	0*	7.70E-01	0*	5.38E+00	0*
Contribution to climate change-fossil	kg CO2 eq	6.14E+00	0*	0*	0*	7.63E-01	0*	5.37E+00	0*
Contribution to climate change-biogenic	kg CO2 eq	1.46E-02	0*	0*	0*	7.42E-03	0*	7.18E-03	0*
Contribution to climate change-land use and land use change	e kg CO2 eq	3.27E-06	0*	0*	0*	3.27E-06	0*	0*	0*
Contribution to ozone depletion	kg CFC-11 eq	9.85E-08	0*	0*	0*	7.55E-08	0*	2.30E-08	0*
Contribution to acidification	mol H+ eq	3.67E-02	0*	0*	0*	5.97E-03	0*	3.07E-02	0*
Contribution to eutrophication, freshwater	kg (PO4)³¯ eq	1.95E-05	0*	0*	0*	4.79E-06	0*	1.47E-05	0*
Contribution to eutrophication marine	kg N eq	4.09E-03	0*	0*	0*	6.04E-04	0*	3.49E-03	0*
Contribution to eutrophication, terrestrial	mol N eq	5.89E-02	0*	0*	0*	6.52E-03	0*	5.24E-02	0*
Contribution to photochemical ozone formation - human health	kg COVNM eq	1.35E-02	0*	0*	0*	2.33E-03	0*	1.12E-02	0*
Contribution to resource use, minerals and metals	kg Sb eq	5.96E-05	0*	0*	0*	5.92E-05	0*	3.90E-07	0*
Contribution to resource use, fossils	MJ	1.51E+02	0*	0*	0*	1.4E+01	0*	1.37E+02	0*
Contribution to water use	m3 eq	5.46E-01	0*	0*	0*	3.56E-01	0*	1.90E-01	0*

Inventory flows Indicators					onnect Co	ommunicati	on Cab	inet - VDIRM003	6
Inventory flows	Unit	[B1 - B7] - Use	[B1]	[B2]	[B3]	[B4]	[B5]	[B6]	[B7]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.65E+01	0*	0*	0*	1.91E-01	0*	2.63E+01	0*
Contribution to use of renewable primary energy resources used as raw material	MJ	5.86E-02	0*	0*	0*	5.86E-02	0*	0*	0*
Contribution to total use of renewable primary energy resources	MJ	2.66E+01	0*	0*	0*	2.49E-01	0*	2.63E+01	0*
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.49E+02	0*	0*	0*	1.2E+01	0*	1.37E+02	0*
Contribution to use of non renewable primary energy resources used as raw material	MJ	2.34E+00	0*	0*	0*	2.3E+00	0*	0*	0*
Contribution to total use of non-renewable primary energy resources	MJ	1.51E+02	0*	0*	0*	1.4E+01	0*	1.37E+02	0*
Contribution to use of secondary material	kg	1.00E-05	0*	0*	0*	1.00E-05	0*	0*	0*
Contribution to use of renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to use of non renewable secondary fuels	MJ	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to net use of freshwater	m³	1.28E-02	0*	0*	0*	8.33E-03	0*	4.43E-03	0*
Contribution to hazardous waste disposed	kg	2.95E-01	0*	0*	0*	1.94E-01	0*	1.01E-01	0*
Contribution to non hazardous waste disposed	kg	1.09E+00	0*	0*	0*	3.17E-01	0*	7.74E-01	0*
Contribution to radioactive waste disposed	kg	3.59E-04	0*	0*	0*	1.97E-04	0*	1.62E-04	0*
Contribution to components for reuse	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to materials for recycling	kg	2.72E-04	0*	0*	0*	2.72E-04	0*	0*	0*
Contribution to materials for energy recovery	kg	0*	0*	0*	0*	0*	0*	0*	0*
Contribution to exported energy	MJ	0*	0*	0*	0*	0*	0*	0*	0*

<sup>\*</sup> represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version v6.1, database version 2023-02 in compliance with ISO14044, EF 3.0 method is applied, for biogenic carbon storage, assessment methodology 0/0 is used

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request

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.

Registration number :	SCHN-01173-V01.01-EN	Drafting rules	PCR-4-ed4-EN-2021 09 06						
		Supplemented by	PSR-0005-ed3.1-EN-2023 12 08						
Verifier accreditation N°	VH48	Information and reference documents	www.pep-ecopassport.org						
Date of issue	05-2024	Validity period	5 years						
Independent verification of the	Independent verification of the declaration and data, in compliance with ISO 14025 : 2006								
Internal	External X								
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 or NF E38-500 :2022 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"



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