Product Environmental Profile

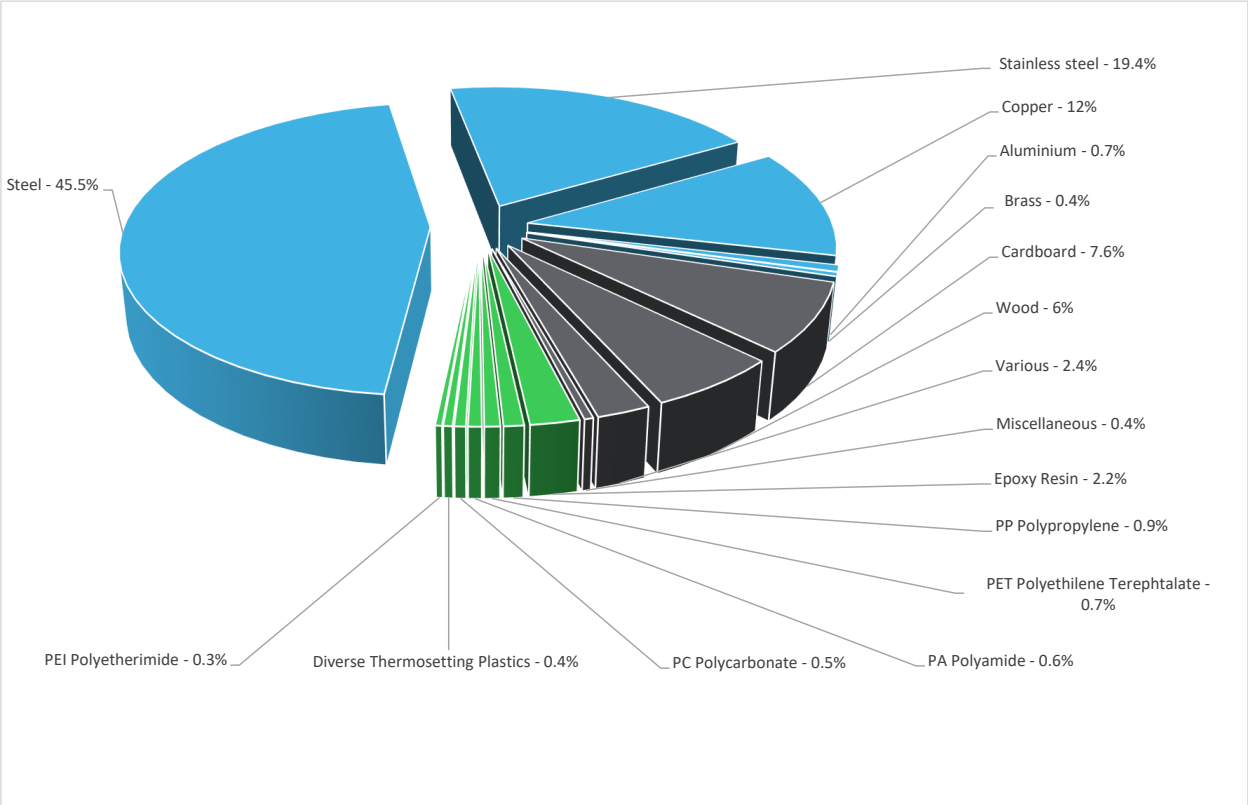
RM6 NE DE-I indoor gas-insulated switchgear up to 24kV

General information

Reference product	RM6 NE DE-I indoor gas-insulated switchgear up to 24kV
Description of the product	RM6 is a gas-insulated switchboard combining all medium voltage functions to enable the connection, supply, and protection of transformers for an open ring or radial network. RM6 meets all medium voltage secondary distribution needs in more complex network configurations where renewable energy supply sources are involved.
Functional unit	Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage U and rated current In. This protection is ensured in accordance with the following parameters: U=Rated voltage(V)=24 kV In= Rated current(A)=630A IK=IK07 in accordance with the standard IEC 62262 IP=IP67 in accordance with the standard IEC 60529 In accordance with IEC 62271-200, IEC 60694, IEC 62271-100, IEC 62271-102, IEC 62271-103

Constituent materials

Reference product mass	150000 g	including the product, its packaging and additional elements and accessories



Plastics	5.6%
Metals	78.0%
Others	16.4%

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/

0.88518

Additional environmental information

End Of Life	Recyclability potential:	**89%**	Recyclability rate has been calculated based on REEECY'LAB 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).

Environmental impacts

Reference service life time	20 years			
Product category	Other equipments - Passive product - continuous operation			
Installation elements	No special installation components need during installation phase, but transport of packaging to disposal and disposal of packaging accounted for during installation.			
Use scenario	Product dissipation is 312.56W at 100% Load and 28.1304 W at 30% load rate & Utilization time is at 100%.			
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	France			
Energy model used	**[A1 - A3]**	**[A5]**	**[B6]**	**[C1 - C4]**
	France	Electricity Mix; Production mix; Low voltage; FR	Electricity Mix; Production mix; Low voltage; FR	Electricity Mix; Production mix; Low voltage; FR

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			**RM6 NE DE-I indoor gas-insulated switchgear up to 24kV**					
Impact indicators	**Unit**	**Total**	**Manufacturing [A1 - A3]**	**Distribution [A4]**	**Installation [A5]**	**Use [B1 - B7]**	**End of Life [C1 - C4]**	**Benefits [D]**
Contribution to climate change	kg CO2 eq	1.61E+03	7.54E+02	4.20E+01	2.80E+01	3.29E+02	4.58E+02	-9.42E+02
Contribution to climate change-fossil	kg CO2 eq	1.60E+03	7.46E+02	4.20E+01	3.21E+01	3.28E+02	4.54E+02	-9.23E+02
Contribution to climate change-biogenic	kg CO2 eq	7.96E+00	7.59E+00	0*	0*	8.49E-01	3.60E+00	-1.93E+01
Contribution to climate change-land use and land use change	kg CO2 eq	6.01E-05	0*	0*	0*	0*	6.01E-05	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	1.61E-04	1.28E-04	2.39E-05	1.38E-06	4.84E-06	2.86E-06	-1.76E-04
Contribution to acidification	mol H+ eq	1.04E+01	6.32E+00	7.18E-01	8.87E-02	1.91E+00	1.40E+00	-1.83E+01
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	1.46E-01	2.24E-03	0*	2.00E-04	1.57E-02	1.28E-01	-1.79E-03
Contribution to eutrophication marine	kg N eq	1.27E+00	5.53E-01	1.91E-01	2.47E-02	2.62E-01	2.39E-01	-6.51E-01
Contribution to eutrophication, terrestrial	mol N eq	1.48E+01	5.98E+00	2.09E+00	1.94E-01	3.77E+00	2.73E+00	-7.48E+00
Contribution to photochemical ozone formation - human health	kg COVNM eq	4.47E+00	2.19E+00	5.79E-01	5.45E-02	7.77E-01	8.76E-01	-3.32E+00
Contribution to resource use, minerals and metals	kg Sb eq	7.31E-02	6.93E-02	0*	0*	1.56E-04	3.61E-03	-3.14E-01
Contribution to resource use, fossils	MJ	1.08E+05	2.35E+04	5.12E+02	2.27E+02	6.32E+04	2.03E+04	-1.88E+04
Contribution to water use	m3 eq	6.51E+02	4.20E+02	1.42E+00	8.91E+00	2.39E+01	1.97E+02	-9.68E+02

Additional indicators for the French regulation are available as well

Inventory flows Indicators		RM6 NE DE-I indoor gas-insulated switchgear up to 24kV						
Inventory flows	Unit	Total	Manufact. [A1 - A3]	Distribution [A4]	Installation [A5]	Use [B1 - B7]	End of Life [C1 - C4]	Benefits [D]
Contribution to use of renewable primary energy excluding renewable primary energy used as raw material	MJ	6.03E+03	4.61E+01	0*	5.27E+01	5.85E+03	8.66E+01	-3.59E+02
Contribution to use of renewable primary energy resources used as raw material	MJ	4.12E+02	4.12E+02	0*	0*	0*	0*	-2.55E+02
Contribution to total use of renewable primary energy resources	MJ	6.44E+03	4.58E+02	0*	5.27E+01	5.85E+03	8.66E+01	-6.14E+02
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.07E+05	2.32E+04	5.12E+02	2.27E+02	6.32E+04	2.03E+04	-1.88E+04
Contribution to use of non renewable primary energy resources used as raw material	MJ	3.63E+02	3.63E+02	0*	0*	0*	0*	-4.70E-02
Contribution to total use of non-renewable primary energy resources	MJ	1.08E+05	2.35E+04	5.12E+02	2.27E+02	6.32E+04	2.03E+04	-1.88E+04
Contribution to use of secondary material	kg	3.57E-01	3.57E-01	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	m^3	1.52E+01	9.77E+00	3.30E-02	2.07E-01	5.55E-01	4.60E+00	-2.25E+01
Contribution to hazardous waste disposed	kg	5.23E+03	5.08E+03	0*	0*	4.90E+00	1.37E+02	-2.61E+04
Contribution to non hazardous waste disposed	kg	6.32E+02	5.21E+02	4.67E-01	7.41E+01	3.17E+01	4.64E+00	-8.79E+02
Contribution to radioactive waste disposed	kg	3.44E-01	3.15E-01	5.68E-03	9.23E-03	1.33E-02	1.07E-03	-3.01E-01
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	1.28E+02	1.09E+00	0*	1.39E+01	0*	1.13E+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	6.12E+00	5.76E-01	0*	5.55E+00	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

These indicators Climate change-Biogenic (GWPb),Ozone depletion (ODP),Acidification (AP),Resource use, minerals and metals (ADPe),Water use (WU) are impacting manufacturing phase,these indicators Resource use, fossils (ADPf) is impacting in Use phase, these indicators Climate change-Land use and land use change (GWPlu),Eutrophication, freshwater (Epf)are impacting in EOL Phase and few indicators Climate change (GWP),Climate change-Fossil (GWPf),Eutrophication marine (Epm),Eutrophication,terrestrial (Ept),Photochemical ozone formation - human health (POCP) are imapcting in all stages.

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-01016-V01.01-EN	*Drafting rules*	PEP-PCR-ed4-2021 09 06
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Date of issue	07/2023		www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010			
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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