Product Environmental Profile

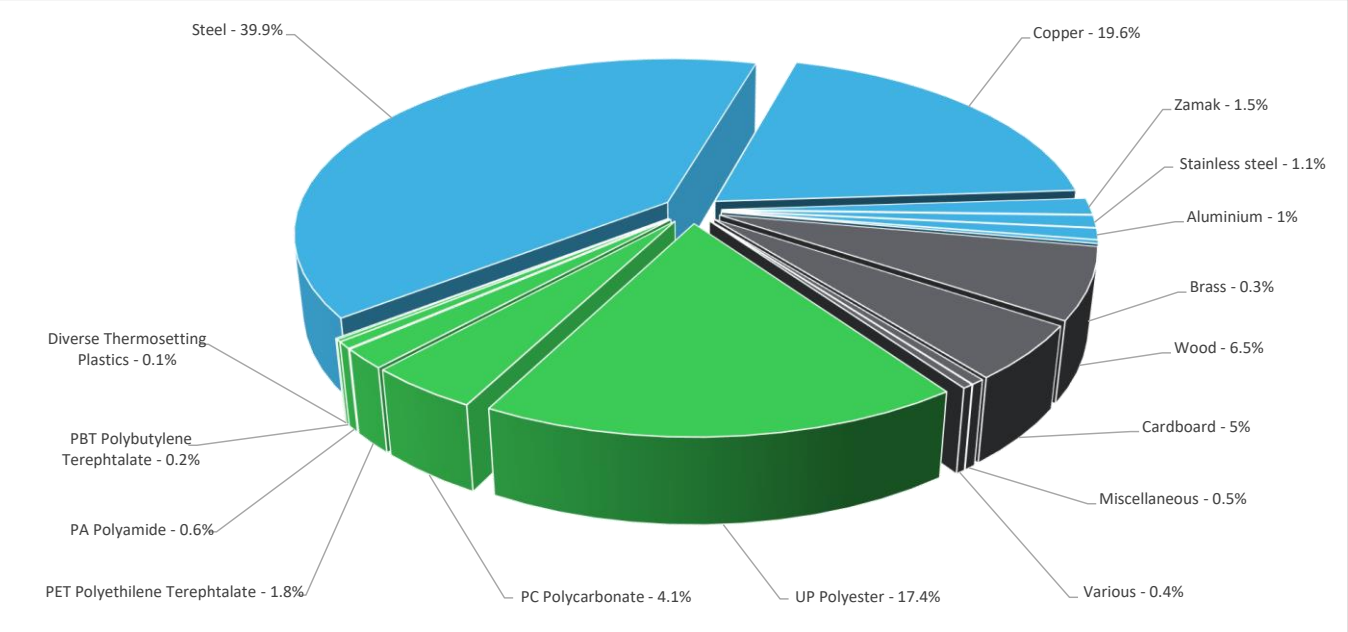
MasterPacT NW25H1 3P Drawout with MicroLogic 5.0A Control Unit

General information

Reference product	MasterPacT NW25H1 3P Drawout with MicroLogic 5.0A Control Unit - 48300
Description of the product	The MasterPacT NW25 H1 3P Drawout Circuit Breaker is designed to guarantee the protection of a low voltage electrical distribution system with assigned voltage up to 690V AC and rated current of 2500A. The breaker can be remotely operated using MX release and MN release Coils. The Micrologic 5.0A control unit fitted with the circuit breaker enhances protection of electrical installation under fault conditions.
Functional unit	Protect during 20 years the installation against overloads and short-circuits in circuit with assigned voltage up to 690VAC and 2500A rated current. This protection is ensured in accordance with the following parameters: - Number of Poles: 3 - Rated Service Breaking Capacity Ics at 440VAC = 65kA (Ics=100%Icu following IEC 60947-2) - Tripping Curve: Long Time, Short Time and Instantanous Protections

Constituent materials

Reference product mass	98000 g	including the product, its packaging and additional elements and accessories



Metals	63.4%
Plastics	24.2%
Others	12.4%

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/

Additional environmental information

End Of Life	Recyclability potential:	**70%**	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	Circuit-breakers
Installation elements	No special components needed
Use scenario	As Per PSR @ Load rate 50% and RLT 30%, The power dissipated by the MasterPacT NW25H1 3P draw out circuit breaker is 600W for 20 years
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.se.com/contact

Mandatory Indicators		**MasterPacT NW25H1 3P Drawout with MicroLogic 5.0A Control Unit - 48300**						
Impact indicators	**Unit**	**Total**	**Manufact. [A1 - A3]**	**Distribution [A4]**	**Installation [A5]**	**Use [B1 - B7]**	**End of Life [C1 - C4]**	**Benefits [D]**
Contribution to climate change	kg CO2 eq	3.89E+03	4.55E+02	1.11E+01	1.58E+01	3.25E+03	1.64E+02	-2.19E+02
Contribution to climate change-fossil	kg CO2 eq	3.88E+03	4.48E+02	1.11E+01	1.89E+01	3.24E+03	1.60E+02	-2.14E+02
Contribution to climate change-biogenic	kg CO2 eq	1.22E+01	7.08E+00	0*	0*	4.34E+00	3.94E+00	-4.49E+00
Contribution to climate change-land use and land use change	kg CO2 eq	6.57E-05	1.05E-07	0*	2.14E-08	8.33E-08	6.55E-05	0.00E+00
Contribution to ozone depletion	kg CFC-11 eq	2.43E-04	2.23E-04	0*	6.23E-07	1.60E-05	2.70E-06	-3.93E-05
Contribution to acidification	mol H+ eq	2.55E+01	5.94E+00	7.04E-02	4.61E-02	1.86E+01	9.20E-01	-4.21E+00
Contribution to eutrophication, freshwater	kg $(PO4)^{3-}$ eq	1.49E-01	9.60E-04	0*	1.04E-04	8.90E-03	1.40E-01	-3.96E-04
Contribution to eutrophication marine	kg N eq	2.72E+00	4.16E-01	3.30E-02	1.29E-02	2.11E+00	1.55E-01	-1.50E-01
Contribution to eutrophication, terrestrial	mol N eq	3.85E+01	4.64E+00	3.62E-01	1.06E-01	3.16E+01	1.78E+00	-1.73E+00
Contribution to photochemical ozone formation - human health	kg COVNM eq	9.08E+00	1.68E+00	9.13E-02	3.09E-02	6.77E+00	5.16E-01	-7.63E-01
Contribution to resource use, minerals and metals	kg Sb eq	1.69E-01	1.59E-01	0*	0*	6.42E-03	3.93E-03	-7.28E-02
Contribution to resource use, fossils	MJ	9.96E+04	7.99E+03	1.55E+02	1.92E+02	8.25E+04	8.74E+03	-4.42E+03
Contribution to water use	m3 eq	6.75E+02	2.96E+02	0*	4.48E+00	1.61E+02	2.14E+02	-2.20E+02

Additional indicators for the French regulation are available as well

Inventory flows Indicators		MasterPacT NW25H1 3P Drawout with MicroLogic 5.0A Control Unit - 48300						
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	1.61E+04	1.92E+02	0*	3.36E+01	1.58E+04	9.46E+01	-9.88E+01
Contribution to use of renewable primary energy resources used as raw material	MJ	1.64E+02	1.64E+02	0*	0*	1.81E-02	0*	-6.21E+01
Contribution to total use of renewable primary energy resources	MJ	1.63E+04	3.56E+02	0*	3.36E+01	1.58E+04	9.46E+01	-1.61E+02
Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	9.93E+04	7.65E+03	1.55E+02	1.92E+02	8.25E+04	8.74E+03	-4.42E+03
Contribution to use of non renewable primary energy resources used as raw material	MJ	3.38E+02	3.35E+02	0*	0*	3.76E+00	0*	-1.82E-01
Contribution to total use of non-renewable primary energy resources	MJ	9.96E+04	7.99E+03	1.55E+02	1.92E+02	8.25E+04	8.74E+03	-4.42E+03
Contribution to use of secondary material	kg	3.98E+00	3.96E+00	0*	0*	2.79E-02	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	1.60E+01	6.89E+00	0*	1.04E-01	3.87E+00	5.17E+00	-5.12E+00
Contribution to hazardous waste disposed	kg	7.46E+03	7.18E+03	0*	0*	1.89E+02	8.67E+01	-6.07E+03
Contribution to non hazardous waste disposed	kg	8.66E+02	3.54E+02	3.90E-01	3.69E+01	4.69E+02	5.50E+00	-1.91E+02
Contribution to radioactive waste disposed	kg	2.67E-01	1.62E-01	2.78E-04	4.22E-03	9.95E-02	7.54E-04	-7.97E-02
Contribution to components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	0.00E+00
Contribution to materials for recycling	kg	6.70E+01	4.45E-01	0*	7.34E+00	4.25E-02	5.92E+01	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	4.38E+00	4.12E-01	0*	3.97E+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.se.com/contact

For all the impact indicators, the Use stage is the greatest contributor due to the energy losses occuring throughout the product reference service lifetime except the Climate change-Land use and land use change (GWPlu), Eutrophication, freshwater(Epf), Climate change-Biogenic(GWPb), Ozone depletion(ODP), Resource use, minerals and metals(ADPe), Water use(WU) stages. The manufacturing stage is the main contributor on Climate change-Biogenic(GWPb), Ozone depletion(ODP), Resource use, minerals and metals(ADPe), Water use(WU) stages. The End Of Life stage is the main contributor on Climate change-Land use and land use change(GWPlu),Eutrophication, freshwater stage(Epf).

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-01033-V01.01-EN	*Drafting rules*	PEP-PCR-ed4-2021 09 06
Verifier accreditation N°	VH08	*Supplemented by*	PSR-0005-ed2-2016 03 29
Date of issue	11/2023	*Information and reference documents*	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 »

Schneider Electric Industries SAS

Country Customer Care Center
http://www.se.com/contact

35, rue Joseph Monier

CS 30323

F- 92500 Rueil Malmaison Cedex

RCS Nanterre 954 503 439
Capital social 896 313 776 €

www.se.com

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