

Owner: Airmaster A/S  
No.: MD-23078-EN  
Issued: 02-06-2023  
Valid to: 02-06-2028

3<sup>rd</sup> PARTY VERIFIED

**EPD**

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



**Owner of declaration**  
Airmaster A/S,  
Industrivej 59, 9600 Aars  
CVR: 29527393



**Issued:**  
02-06-2023

**Valid to:**  
02-06-2028

**Programme**  
EPD Danmark  
[www.epddanmark.dk](http://www.epddanmark.dk)



- Industry EPD
- Product EPD

**Declared product(s)**  
AM1000 decentralised ventilation unit

Number of declared datasets/product variations: 1

**Production site**  
Tolstrupbyvej 8,  
9600 Aars  
Denmark

**Product(s) use**  
Decentralised ventilation unit for rooms.

**Declared/ functional unit**  
One AM1000 decentralised ventilation unit with an air capacity of 300-1050 m<sup>3</sup>/h.

**Year of production site data (A3)**  
2021

**EPD version**  
No. 1

**Basis of calculation**

This EPD is developed in accordance with the European standard EN 15804+A2.

**Comparability**

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

**Validity**

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

**Use**

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

**EPD type**

- Cradle-to-gate with modules C1-C4 and D
- Cradle-to-gate with options, modules C1-C4 and D
- Cradle-to-grave and module D
- Cradle-to-gate
- Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

internal                       external

Third party verifier:

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Mirko Miseljic

Martha Katrine Sørensen  
EPD Danmark

Life cycle stages and modules (MND = module not declared)																	
Product			Construction process		Use								End of life			Beyond the system boundary	
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	X	X	MND	X	MND	MND	MND	X	MND	X	X	X	X	X	

# Product information

## Product description

The dimensions (WxHxD) of AM1000 are approximately 2325 x 561 x 1283 mm, and the total weight is approximately 318.6 kg.

The function of AM1000 is to provide fresh air by circulating air through supply and exhaust filters which removes dust and particles and lowers the CO2 levels in the indoor climate.

The main product components are shown in the table below.

Material	Weight-% of declared product
Steel	79.6
Aluminium	7.5
Insulation	7.2
Electronics	2.80
Plastic	1.50
Other	1.40

## Product packaging:

The composition of the sales- and transport packaging of the product is shown in the table below.

Material	Weight-% of packaging
Wooden pallet	89.2
LPDE foil	5.8
Corrugated cardboard	4.5
EPS	0.5

## Representativity

This declaration, including data collection and the modelled foreground system including results, represents the production of AM1000 decentralised ventilation unit on the production site located in Denmark. Product specific data are based on values collected in the period January to December

2021. Background data are less than 10 years old and are based on GaBi Professional database and EcoInvent. Generally, the used background datasets are of high quality.

## Hazardous substances

AM1000 does not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation".

<http://echa.europa.eu/candidate-list-table>

## Essential characteristics

AM1000 is covered by harmonised technical specification EN 1886:2008 and EN 13141-7:2010. Additionally, AM1000 complies with following EU directives: DIRECTIVE 2006/42/EC, DIRECTIVE 2014/30/EC, DIRECTIVE 2009/125/EC, and DIRECTIVE 2011/65/EU.

This EPD is based on a HH TT model where the supply and exhaust are placed horizontally. The AM1000 comes with different options and can therefore be customized as needed. Further technical information can be obtained by contacting the manufacturer or on the manufacturer's website:

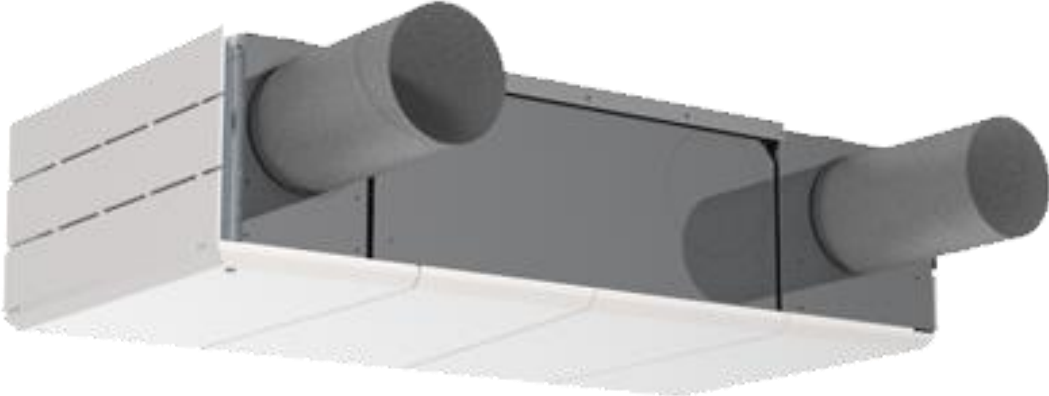
<https://www.airmaster.dk/produkter/vaegh-aengte-ventilationsanlaeg/am-1000>

For the specific available options and models of the AM1000 contact Airmaster A/S.

## Reference Service Life (RSL)

The reference service life is set to 25 years, which is an estimated average lifetime based on [BUILD Report 2021:32](#) by Department of the Built Environment (Aalborg University).

Picture of product(s)



# LCA background

## Declared unit

The LCI and LCIA results in this EPD relates to "One AM1000 decentralised ventilation unit with an air capacity of 300-1050 m<sup>3</sup>/h".

Name	Value	Unit
Declared unit	1	Unit
Density	318.6	kg/unit
Conversion factor to 1 kg.	0.003	-

## Functional unit

Not defined

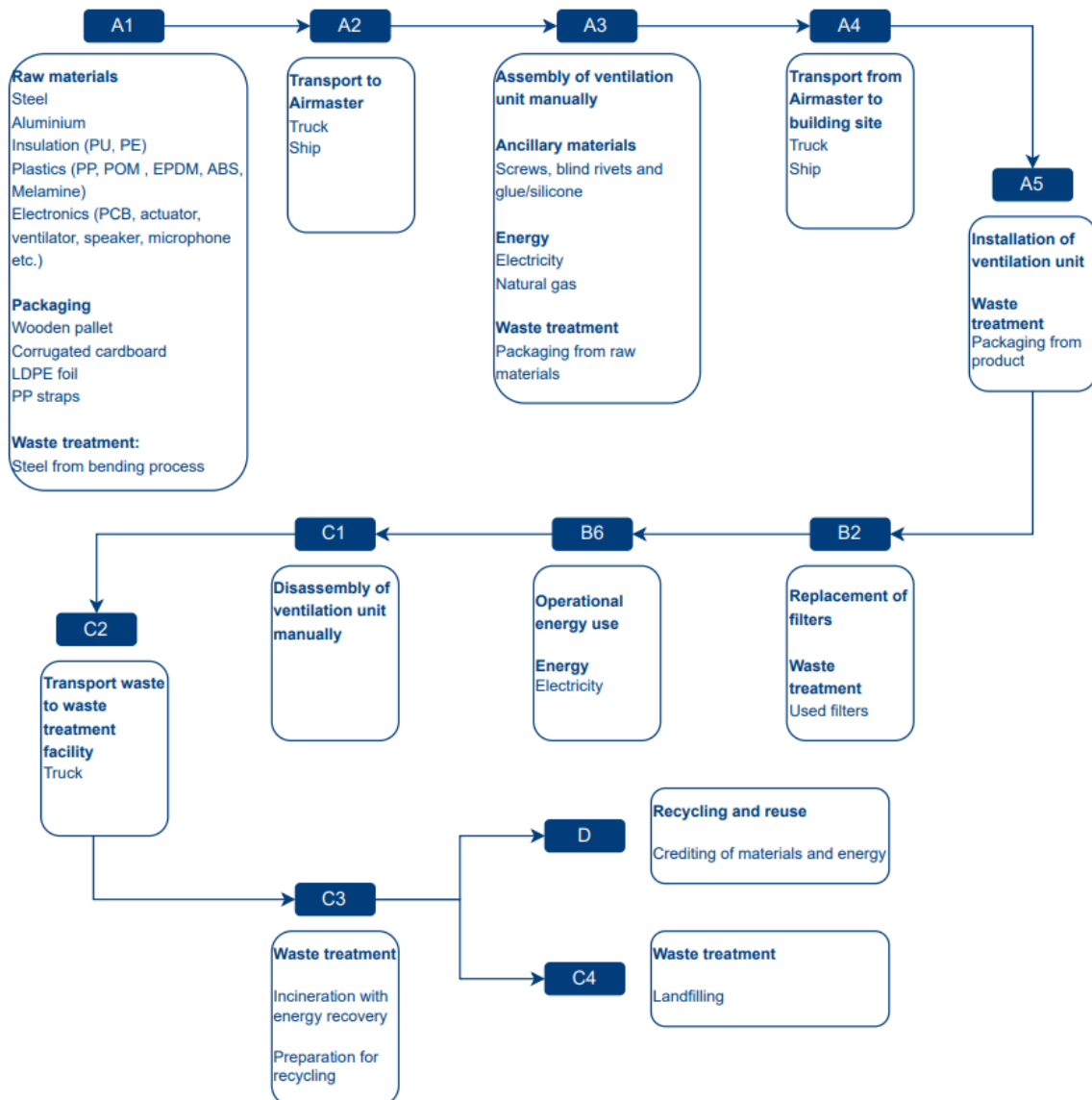
## PCR

This EPD is developed according to the core rules for the product category of construction products in PCR EN 15804:2012+A2:2019.

## Geographical area

The geographical area is EU

## Flow diagram



## System boundary

This EPD is based on a cradle-to-gate with options, modules C1-C3 and module D cf. EN 15804 + A2, in which 100%-weight of the product has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

### Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

A2 – Transport to the production site

A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the “end-of-waste” state or final disposal. The LCA results are declared in aggregated form for the product stage, which means, that the sub-modules A1, A2 and A3 are declared as one module A1-A3.

*Steel:* AM1000 has a steel cabinet which account for the majority of the weight. The scrap content in the steel varies from 17.4-18.2%. The steel is produced through the processes of blast furnace-basic oxygen furnace (BF-BOF) route and is hot-dipped galvanized. The cabinet sheets are bended, welded, and surface treated at the suppliers before arriving at Airmaster. A process has been included in A1 to account for these processes. Additionally, small fixing parts is included in the steel.

*Aluminium:* The aluminium is modelled as primary aluminium.

*Plastic:* There are several types of plastic components in the AM1000 which are modelled using representative datasets on the plastic types. A process is included to account for the moulding and shaping of the plastic components.

*Electronic:* As AM1000 is an electronic ventilation unit, several electronic components are present in the unit. These are modelled based on information from suppliers.

Generally, the components of the AM1000 unit are premanufactured and assembled manually at the production facility in Aars (DK). AM1000 is exclusively produced at a separate site in Aars, DK thus the energy can be directly allocated based on the number of produced AM1000 units in 2021. The finished AM1000 is packed and distributed.

### Construction process stage (A4-A5) includes:

Module A4 includes the impacts associated with the transportation of the finished product. The finished product is distributed to different markets in EU. The utilization capacity of the truck (including empty return) is 61%. Additionally, transportation with ship is also included. The utilization capacity is 70%.

A weighted average distance has been calculated based on the market distribution.

The installation of AM1000 is done manually. Therefore, the energy needed for this process is only associated with an electric screwdriver. Additionally, screws are needed for installation. These two processes are excluded due to the negligible impacts.

Module A5 includes the end-of-life treatment of the packaging. Here, cardboard, LDPE foil and EPS are assumed recycled. AM1000 is distributed on special pallets which are assumed incinerated.

**Use stage (B1-B7) includes:**

**B2:** To maintain AM1000 and ensure it delivers fresh, ventilated air continuously throughout its lifetime, it requires ventilation filters to be replaced. Airmaster estimates a replacement of the two filters (supply and exhaust) every year to maintain an optimal performance of AM1000. The production of new filters is included in B2 according to EN 15804 + A2. The waste treatment of the used filters is included in B2.

**B6:** As no c-PCR for decentralised ventilation units exists, no common use scenario for module B6 is available. Module B6 is declared as the unit uses electricity to fulfil its function. The electricity use in module B6 will depend on the use pattern in the specific situation. To include B6, a scenario of an air volume of 762 m<sup>3</sup>/h from 7 am to 4 pm 200 days a year has been assumed (see page 13 for further description of the scenario). The RER electricity mix has been applied to model the usage of energy for AM1000, since Airmaster has customers in several European countries. B6 is modelled for 1 year and does therefore not represent the total reference service life of 25 years. According to the Danish Building Regulation, B6 from EPDs is not used in the LCA modelling of buildings. Therefore, one year has been included to indicate an average electricity use for the given scenario.

**End of Life (C1-C4) includes:**

No impacts from dismantling have been included in module C1 as this is done manually.

Module C2 includes the impacts associated with the transport of the waste from the dismantling to the waste handling. The product is placed on different European markets, average distances to waste handling for countries have been included to account for the different distances. For

energy recovery an average of 50 km has been modelled. For recycling an average of 200 km has been modelled to account for the transportation of materials to a recycling facility.

Module C3 contains the impacts of waste handling. Here, the impacts of recycling and incineration is modelled. 87% of the product is recycled and 11% is modelled as incineration. For the metals in the electronic a recycling rate of 90% is assumed.

Module C4 covers the impacts of landfilling. Following waste treatment rates (recycling, incineration, and landfilling) are included in the waste treatment.

Materials	Recycling rate (%)	Incineration rate (%)	Landfilling Rate (%)
Steel	98	0	2
Aluminium	95	0	5
Insulation	0	100	0
Plastics	0	100	0
Plastic PVC	100	0	0
Metals in electronics	90	0	10

**Re-use, recovery and recycling potential (D) include:**

In module D potential benefits from recovery and recycling of materials in the product are calculated. The materials are either used as secondary materials in a new product system, thus substituting virgin materials, or incinerated with energy recovery. To avoid double counting, the amount of scrap in the steel is not credited in module D.

# LCA results

ENVIRONMENTAL IMPACTS PER AM1000											
Indicator	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
GWP-total	kg CO <sub>2</sub> eq.	1.28E+03	2.25E+01	4.71E+01	1.04E+02	7.15E+01	0.00E+00	5.33E+00	8.10E+01	2.67E-01	-2.55E+02
GWP-fossil	kg CO <sub>2</sub> eq.	1.33E+03	2.24E+01	1.08E+00	1.04E+02	7.07E+01	0.00E+00	5.31E+00	8.10E+01	2.70E-01	-2.57E+02
GWP-biogenic	kg CO <sub>2</sub> eq.	-4.56E+01	-1.34E-01	4.60E+01	4.48E-01	7.68E-01	0.00E+00	-3.18E-02	5.48E-03	-3.10E-03	1.28E+00
GWP-luluc	kg CO <sub>2</sub> eq.	1.14E+00	2.05E-01	2.08E-03	9.96E-03	7.62E-03	0.00E+00	4.87E-02	2.33E-04	2.65E-04	-6.51E-02
ODP	kg CFC 11 eq.	6.92E-05	2.89E-12	4.97E-12	3.96E-10	1.29E-09	0.00E+00	6.85E-13	6.75E-12	4.30E-13	-1.85E-09
AP	mol H <sup>+</sup> eq.	5.00E+00	1.20E-01	9.27E-03	3.02E-01	1.49E-01	0.00E+00	2.80E-02	4.31E-02	8.36E-04	-9.56E-01
EP-freshwater	kg P eq.	3.36E-01	8.11E-05	4.19E-06	1.34E-04	2.62E-04	0.00E+00	1.92E-05	2.15E-06	2.36E-07	-8.22E-04
EP-marine	kg N eq.	1.07E+00	5.72E-02	2.88E-03	5.11E-02	3.57E-02	0.00E+00	1.35E-02	2.03E-02	2.10E-04	-1.69E-01
EP-terrestrial	mol N eq.	1.15E+01	6.36E-01	3.97E-02	5.54E-01	3.73E-01	0.00E+00	1.50E-01	2.36E-01	2.31E-03	-1.81E+00
POCP	kg NMVOC eq.	3.28E+00	1.13E-01	7.52E-03	1.66E-01	9.52E-02	0.00E+00	2.65E-02	5.23E-02	6.58E-04	-5.44E-01
ADPm <sup>1</sup>	kg Sb eq.	1.06E-01	1.46E-06	5.99E-08	7.46E-06	1.08E-05	0.00E+00	3.47E-07	6.14E-08	7.14E-09	-2.94E-03
ADPf <sup>1</sup>	MJ	1.68E+04	3.03E+02	1.54E+01	1.67E+03	1.47E+03	0.00E+00	7.17E+01	2.10E+01	3.90E+00	-3.56E+03
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	1.90E+02	2.68E-01	5.46E+00	1.13E+01	1.54E+01	0.00E+00	6.36E-02	8.07E+00	-3.54E-03	-3.09E+01
Caption	GWP-total = Global Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication - aquatic freshwater; EP-marine = Eutrophication - aquatic marine; EP-terrestrial = Eutrophication - terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential - minerals and metals; ADPf = Abiotic Depletion Potential - fossil fuels; WDP = water use										
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.										



ADDITIONAL ENVIRONMENTAL IMPACTS PER AM1000											
Parameter	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
PM	[Disease incidence]	5.11E-05	6.07E-07	6.05E-08	1.91E-06	1.25E-06	0.00E+00	1.38E-07	1.38E-07	9.02E-09	-1.07E-05
IRP <sup>2</sup>	[kBq U235 eq.]	8.07E+01	8.47E-02	1.14E-01	2.60E+00	3.87E+01	0.00E+00	2.01E-02	1.39E-01	6.70E-03	-3.95E+01
ETP-fw <sup>1</sup>	[CTUe]	3.41E+04	2.15E+02	8.01E+00	6.74E+02	6.47E+02	0.00E+00	5.09E+01	7.94E+00	1.11E+00	-1.31E+03
HTP-c <sup>1</sup>	[CTUh]	1.30E-06	4.41E-09	5.77E-10	2.03E-08	2.16E-08	0.00E+00	1.04E-09	6.59E-10	1.37E-10	-1.18E-07
HTP-nc <sup>1</sup>	[CTUh]	3.46E-05	2.45E-07	3.83E-08	1.02E-06	5.31E-07	0.00E+00	5.80E-08	2.90E-08	1.37E-08	-5.31E-06
SQP <sup>1</sup>	-	4.12E+03	1.26E+02	4.97E+00	1.49E+02	5.78E+02	0.00E+00	3.00E+01	4.80E+00	3.64E-01	-1.51E+03
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality										
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. <sup>2</sup> This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.										

RESOURCE USE PER AM1000											
Parameter	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
PERE	[MJ]	2.87E+03	2.20E+01	3.33E+00	2.00E+02	8.78E+02	0.00E+00	5.22E+00	4.13E+00	3.50E-01	-1.93E+03
PERM	[MJ]	6.03E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	[MJ]	3.48E+03	2.20E+01	3.33E+00	2.00E+02	8.78E+02	0.00E+00	5.22E+00	4.13E+00	3.50E-01	-1.93E+03
PENRE	[MJ]	1.70E+04	3.04E+02	1.54E+01	1.67E+03	1.47E+03	0.00E+00	7.20E+01	2.10E+01	3.90E+00	-3.56E+03
PENRM	[MJ]	1.05E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	1.80E+04	3.04E+02	1.54E+01	1.67E+03	1.47E+03	0.00E+00	7.20E+01	2.10E+01	3.90E+00	-3.56E+03
SM	[kg]	4.49E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	[m <sup>3</sup> ]	7.04E+00	2.41E-02	1.29E-01	3.74E-01	7.06E-01	0.00E+00	5.71E-03	1.90E-01	4.39E-05	-2.49E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water										

WASTE CATEGORIES AND OUTPUT FLOWS PER AM1000											
Parameter	Unit	A1-A3	A4	A5	B2	B6	C1	C2	C3	C4	D
HWD	[kg]	1.30E-04	9.41E-10	3.06E-10	1.29E-07	-1.15E-07	0.00E+00	2.23E-10	1.65E-09	3.22E-10	-9.36E-07
NHWD	[kg]	9.22E+01	4.63E-02	1.14E+00	1.03E+01	1.08E+00	0.00E+00	1.10E-02	1.32E+00	5.59E+00	-3.95E+01
RWD	[kg]	3.08E-01	5.68E-04	7.13E-04	2.24E-02	2.33E-01	0.00E+00	1.35E-04	8.84E-04	4.53E-05	-2.39E-01

CRU	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	[kg]	2.97E+01	0.00E+00	3.54E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E+02	0.00E+00	0.00E+00
MER	[kg]	5.40E+00	0.00E+00	3.06E+01	3.60E+01	0.00E+00	0.00E+00	0.00E+00	3.33E+01	0.00E+00	0.00E+00
EEE	[MJ]	6.65E+00	0.00E+00	6.92E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E+02	0.00E+00	0.00E+00
EET	[MJ]	1.52E+01	0.00E+00	1.25E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E+02	0.00E+00	0.00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Eksporteret elektrisk energi; EET = Eksporteret termisk energi										

BIOGENIC CARBON CONTENT PER AM1000		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon content in accompanying packaging	[kg C]	13.56
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>	

# Additional information

## LCA interpretation

The results of the EPD shows the environmental impact associated with one AM1000 decentralised ventilation unit. Through a contribution analysis, the production of steel is clearly the most dominant source of impact. Next to steel, the production of aluminium contributes the most.

## Technical information on scenarios

### Transport to the building site (A4)

Scenario information	Truck	Ship	Unit
Fuel type	Diesel	Diesel	-
Vehicle type	Truck, Euro 5, 28 - 32t gross weight / 18.4t payload capacity	Container ship, 5,000 to 200,000 dwt payload capacity, ocean going	-
Transport distance	704 (average)	12 (average)	km
Capacity utilisation (including empty runs)	61	70	%
Gross density of products transported (incl. packaging)	352.9	352.9	kg/unit

### Installation of the product in the building (A5)

Scenario information	Value	Unit
Ancillary materials	0	kg
Water use	0	m <sup>3</sup>
Other resource use	0	kg
Energy type and consumption	0	kWh
Waste materials	34.3 (waste packaging)	kg
Output materials	0	kg
Direct emissions to air, soil or water	0	kg

## Reference service life

RSL information	Unit
Reference service Life	25 Years
Declared product properties	The declared unit is one AM1000 decentralised ventilation unit with an air capacity of 300-1050 m <sup>3</sup> /h.
Assumed quality of work	Technical specifications and guidance can be obtained at <a href="https://www.airmaster-as.com/products/ventilation-units-wall-mounted/am-1000">https://www.airmaster-as.com/products/ventilation-units-wall-mounted/am-1000</a> or by directly contacting Airmaster A/S.
Maintenance	The AM1000 requires change of filters once a year during its reference service life.

**Use (B1-B7)**

Scenario information	Value	Unit
<b>B2 - Maintenance</b>		
Maintenance process	To maintain AM1000, it is necessary to replace filters once a year throughout its operating life.	
Maintenance cycle	1	/year
Ancillary materials for maintenance (specify which)	1.5	kg/cycle
Waste materials resulting from maintenance (specify which)	1.5	kg
<b>B6 + B7 – Use of energy and water</b>		
Type of energy carrier	225	kWh
Further assumptions for scenario development	The scenario is based on a classroom scenario with 21 students (average) and 2 teachers. To keep the PPM concentration below 1000, a ventilation volume of 9.4 l/s per person is necessary provided that the CO2 concentration outside is 400 ppm. This thus gives an operation of 762 m3/h. The scenario is set up with an operating period from 7-16 200 days a year to reflect the school hours. This combination results in an energy consumption of 225 kWh/year. The filter class is ePM10 50% (compliant with ISO 16890).	As appropriate

**End of life (C1-C4)**

Scenario information	Value	Unit
Collected separately	318.6	kg
Collected with mixed waste	0	kg
For reuse	0	kg
For recycling	277	kg
For energy recovery	35	kg
For final disposal	6.5	kg
Assumptions for scenario development	50 km for materials to waste incineration and 200 km for materials going to recycling facilities.	As appropriate

**Re-use, recovery and recycling potential (D)**

Scenario information/Materiel (energy recovery)	Value	Unit
Module A5	Wood pallet	30.6 kg
Module B2	Filters	36 kg
Module C3	Plastics (PP, ABS, EPDM, Melamine resin, POM), plastic in electronics, insulation, and filters	35 kg

Scenario information/Materiel (recycling)	Value	Unit
Module A5	LDPE film, EPS, corrugated cardboard	3.7 kg
Module C3	Steel, Aluminium, PVC, metals in electronics, copper	277 kg

**Indoor air**

*The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.*

**Soil and water**

*The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.*

## References

<b>Publisher</b>	 <a href="http://www.epddanmark.dk">www.epddanmark.dk</a>
<b>Programme operator</b>	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup <a href="http://www.teknologisk.dk">www.teknologisk.dk</a>
<b>LCA-practitioner</b>	<i>Mathilde Sørensen Nilsson                  Artelia A/S                  Marine Thomsens Gade 1c                  8000 Aarhus C                  Denmark</i>
<b>LCA software /background data</b>	<i>Sphera LCA for Experts vers. 10.7, professional database, version 2023.1 and EcoInvent vers. 3.9.1</i>
<b>3<sup>rd</sup> party verifier</b>	<i>Mirko Miseljic                  Force Technology</i>

**General programme instructions**

General Programme Instructions, version 2.0, spring 2020  
[www.epddanmark.dk](http://www.epddanmark.dk)

**EN 15804**

DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

**EN 15942**

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

**ISO 14025**

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

**ISO 14040**

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

**ISO 14044**

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"

**Sphera LCA for Experts (formerly GaBi) version 10.7**

Professional Database, version 2023.1 <https://sphera.com/product-sustainability-software/>

**EcoInvent**

Ecoinvent version 3.9.1