Environmental Declaration - Type II Self-declared Environmental Claims

General information

Declaration type	Environmental labels and declarations - Self-declared environmental claims - Type II environmental labelling - compliant with ISO 14021:2016
	This document encompasses a range of products with similar material compositions and specifically highlights the product with the greatest weight within that range.
Owner of this declaration	BELIMO Automation AG
	Brunnenbachstrasse 1
	8340 Hinwil
	Switzerland
Description of the organisation	BELIMO Automation AG is a leading global developer, manufacturer, and distributor of field devices, which are crucial in the precise control of heating, ventilation, and air conditioning systems. Our consistent commitment to innovation, reliability, and energy efficiency directly influences system performance and efficiency.
	Our global headquarters is in Hinwil, Switzerland, and we have a presence in more than 80 countries worldwide. Our focus on providing localised customer support and service underlines our role as a reliable international partner. Our dedication to sustainability and environmental protection is evident in our corporate strategies, daily operations, and especially in our approach to product development.
Product-related or management system-related certifications	Quality management ISO 9001
	Environmental management ISO 14001

Belimo and the UN Sustainable Development Goals (SDGs)

At Belimo, our product portfolio, business processes, and values are naturally aligned with UN Sustainable Development Goals, focusing on the environment, health and well-being, and society.

Trust, integrity, competence, and responsibility – values that lie at the foundation of environmental, economic, and social sustainability – define our corporate culture. As an employer, we support personal commitment, teamwork, cultural diversity, and the courage to take risks to inspire customers. We have designed and optimised our product portfolio to maximise energy efficiency and longevity. One hundred percent of our sales align with the UN Sustainable Development Goals.

Our overall sustainability mission is to promote global sustainability by creating healthier indoor environments that consume less energy.

Health and well-being	Belimo products offer improved indoor air quality, promoting the health, comfort, and well-being of building occupants and enabling critical applications. Our intelligent HVAC components control the major factors affecting room climate and assure a stable and healthy environment (SDG 3).
Environment	Our products save energy and reduce CO2 emissions. Moreover, they increase the energy efficiency of buildings (SDG 7) and contribute to their resilience (SDG 9), while making our cities safer and more sustainable (SDG 11). Through our activities, we contribute to doubling the global rate of improvement in energy efficiency, creating measurable sustainability benefits, and strengthening resilience and adaptive capacity to climate-related disasters (SDG 13).

Belimo and the UN Sustainable Development Goals (SDGs)

Society As an employer, we continuously create excellent jobs that emphasise personal commitment, engagement, growth, teamwork, and cultural diversity (SDG 8). We uphold sustainable procurement practices and localised sourcing, minimising waste, and optimising logistics through modularising our product ranges and applying environmental management standards at our central production sites (SDG 12).

Covered products

Representative product: PKCA-BAC-S2-T

This document is based on the representative product with the greatest weight in the product group. The list that follows includes all products covered by this declaration.

Covered products:

PKCA-BAC-S2-T

Product information

Chemical disclosure RoHS   EU Directive 2011/65/EU (RoHS)

This product complies with the EU Directive 2011/65/EU (RoHS), which restricts the use of specific hazardous materials in electrical and electronic equipment.

REACH   1907/2006 (EC Regulation REACH)

This product complies with the provisions of EC Regulation No 1907/2006, also known as REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals).

Recycling and end-of-life information

Recycling quota 66.66 %

The recycling quota (metal material proportion) is calculated using the following formula:

Recycling quota = 100 x Metal weight / Total weight

Recycling rate 99.99 %

For calculating the recycling rate (metal and plastic material proportion), the following formula is used:

Recycling rate = 100 x (Metal weight + Plastic material weight) / Total weight

Disposal Product

Devices belonging to this product family should be properly disposed of after their life cycle and should not be disposed of with regular domestic waste.
Local and applicable regulations apply.

Packaging

Belimo's packaging providers perform their work according to RESY guidelines.
Packaging is recyclable.

Environmental benefit

Belimo offers tailored and optimised solutions that cater to all customer demands, and improve cost efficiency over the entire building life cycle.

Belimo products and processes are continuously optimised and enhanced. This is achieved by close collaboration with suppliers and partners.

Logistics

Transport Due to the strategic presence of our Customisation Centres globally, Belimo has effectively managed to minimise transport routes.

Logistics

	Component	Material	Weight
Packaging values	box Insert 255x350x7	56088	59 g
	Foldbox PRK 390x191x270	56539-00001	322 g

Product materials and fire load

	Material	Weight	% Weight	Fire load
Plastic	EPDM	0.26 g	<0.5%	0.01 MJ
	PA	53.11 g	1%	1.49 MJ
	PC	1210.53 g	18%	35.11 MJ
	PET	0.12 g	<0.5%	
	POM	119.08 g	2%	2.02 MJ
	PVC	1.97 g	<0.5%	0.04 MJ
	Silicone	0.4 g	<0.5%	0.01 MJ
	Other plastic materials	68.83 g	1%	2.06 MJ
Electronics	Electronics	783.43 g	12%	15.67 MJ
Metal	Aluminium	2629.46 g	39%	
	Brass	75.86 g	1%	
	Stainless steel	142.86 g	2%	
	Steel	1627.04 g	24%	
Others	Cardboard	0.8 g	<0.5%	
Total		6713.77 g		56.41 MJ

* without packaging materials

Fire load calculation according to the formula:

Fire load [MJ] = weight [kg] x energy value [MJ/kg]

Basic embodied carbon calculation

Calculation methodology	The embodied carbon calculation herein follows the 'Basic' methodology outlined in TM65 by the Chartered Institution of Building Services Engineers (CIBSE). This approach relies on data pertaining to the product's material composition to compute embodied carbon for both the A1 (Material Extraction) stage and the B3 (Repair) stage.
	Scale-up and buffer factors are employed to account for additional life cycle stages such as A2 (Transport to Factory), A3 (Manufacturing), A4 (Transport to Site), C2 (Transport to Waste Processing), C3 (Waste Processing), and C4 (Disposal).
Product life service	15 years
Product complexity	Category 2 (CIBSE TM65 Table 4.3)

Embodied carbon results [kgCO$_2$e]	A1: Material extraction (components that are replaced in B3)	3.02 kgCO$_2$e
	A1: Material extraction (original product)	30.22 kgCO$_2$e
	A1–A4, B3, C2–C4: Total embodied carbon with scale-up and buffer factors	**60.51 kgCO$_2$e**

Assumptions	A1: Material carbon coefficient source	CIBSE TM65, Table 2.1
	B3: Materials replaced as part of repair (%)	CIBSE TM65, Table 2.1

Disclaimer

This environmental declaration, classified as Type II, was prepared by Belimo Automation AG in alignment with ISO 14021 standards. This document is provided solely for informational purposes. As Belimo products continue to advance technically, we reserve the right to introduce technical modifications without prior notice or announcement.

The information in the product confirmation is based on Belimo's best knowledge at the time of release of this document. This declaration is provided on an "as is" basis without express or implied warranties or commitments of any kind.