

SAUTER Declaration on materials and the environment

Product



Type	ASV215BF152D ASV215BF152E
Designation	VAV compact controller
Product range	Electric actuators
Product group of eco-balance	Positioning actuators

Manufacturer

Fr. Sauter AG
Im Surinam 55, CH-4016 Basel

Management system certified according to

	Since	With
ISO 9001	10 Aug. 1993	SQS
ISO 9001:2000	10 Aug. 2002	SQS
ISO 14001:2004	10 Aug. 2005	SQS
OHSAS 18001:1999	10 Aug. 2005	SQS

Environmentally-compatible product design

Basis	Management system Fr. Sauter AG
Process	Business process <ul style="list-style-type: none"> • Product innovation • Ecological accounting

Product description	CE conformity	PDS 52.560
	Function, operation, maintenance, service	PDS, no maintenance required
Environmental risk	Fire protection according to Fire load ¹	EN 60695-2-11, EN 60695-10-2 6.0 MJ
	Hazardous substances ² Banned substances (see link below)	Conforming to RoHS 2011/65/EU Conforming to REACH 1907/2006/EC
	Parts containing halogen (causing corrosive smoke)	Printed circuit board
	Liquids polluting the aquatic environment	Lubricant
	Explosive substances	None
Packaging ³	Folding cardboard box	33.2 g
	Paper	7.8 g
	LDPE	3.9 g

Materials

Total weight of product ⁴	692.7 g	Material Safety Data Sheet (MSDS)	EU waste code ⁵
Plastic			
PA66	11.3 g	Yes	20 01 39
PBT	15.0 g	Yes	20 01 39
POM	18.2 g	Yes	20 01 39
PC	130.8 g	Yes	20 01 39
Metal			
Steel of different alloys	236.3 g	Not required	20 01 40
Sintered metal with Fe	65.7 g	Not required	20 01 40
Zinc, cast element	92.6 g	Not required	20 01 40
Printed circuit board			
Assembled PCB, lead-free solder	60.3 g	Not required	20 01 36
Special components			
Motor	70.0 g	Not required	20 01 36
Lubricant	1.0 g	Yes	20 01 26

¹ See **Remarks** on page 5

² Only applies to electrical devices

³ Directive 94/62/EC and follow-on document, ruling 97/129/EC

⁴ See **Remarks** on page 5

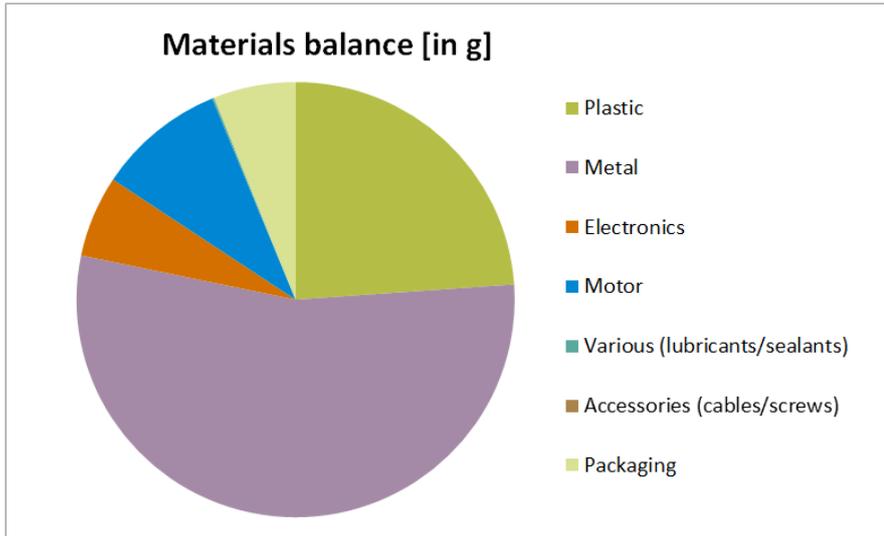
⁵ Directive 75/442/EEC and follow-on document, ruling 2001/118/EC



Note

The following materials balance and the calculation of the environmental impact relate to type ASV215BF152D and ASV215BF152E.

Materials balance



Energy requirement in the utilisation phase

Power requirement for component

Minimum power consumption 1.5-2.3 W

Average power consumption 10-11 W

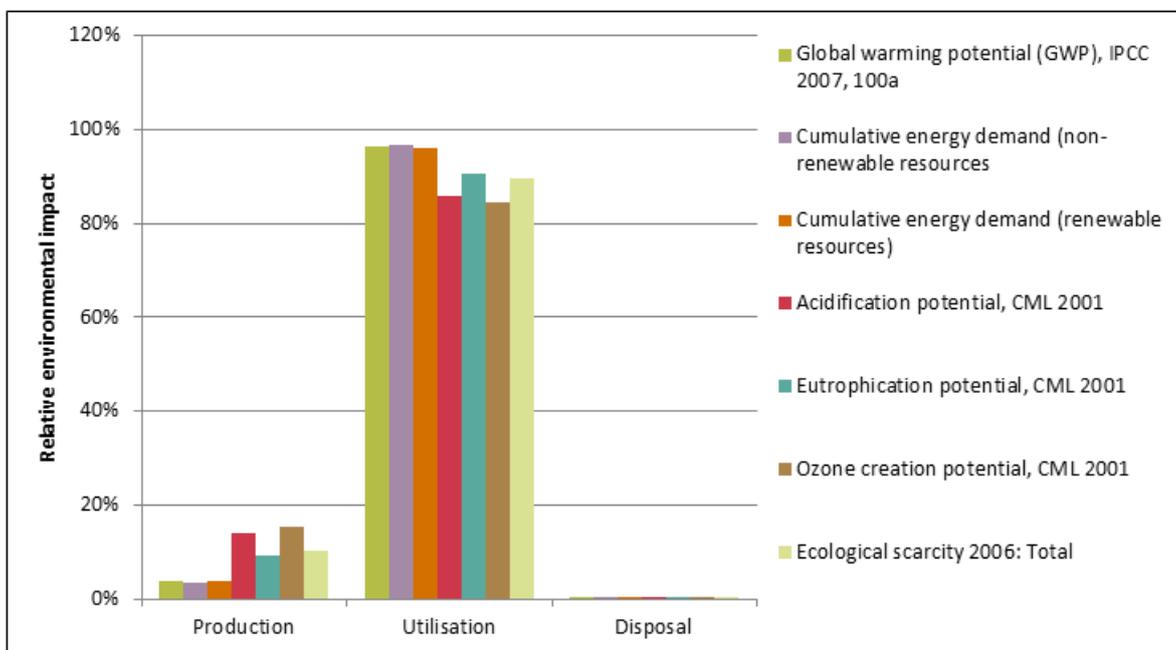
Typical energy consumption per year 11.2 kWh/a

The energy requirement evaluation was performed for a typical utilisation scenario. The European electricity mix from ecoinvent 2.2 was used to evaluate the power consumption in the utilisation phase.

Calculation of the environmental impact

Evaluation over the entire life stage of 8 years in a typical utilisation scenario. The results shown are based on a method of ecological scarcity that combines various environmental effects into an “environmental impact points” key figure. The method is based on Switzerland’s environmental targets and evaluates the individual effects depending on the “Distance to Target”.

Indicator	Unit	Production	Utilisation	Disposal	Total
Global warming potential (GWP), IPCC 2007, 100a	kg CO ₂ eq.	9.4	246.8	0.2	256.5
Cumulative energy demand (non-renewable resources)	MJ eq.	173	5'000	0.6	5'174
Cumulative energy demand (renewable resources)	MJ eq.	15.0	379.0	0.01	394.1
Acidification potential, CML 2001	kg SO ₂ eq.	1.67E-01	1.02E+00	1.70E-04	1.18E+00
Eutrophication potential, CML 2001	kg PO ₄ -- eq.	8.33E-02	8.09E-01	1.08E-04	8.92E-01
Ozone creation potential, CML 2001	kg C ₂ H ₄ eq.	7.46E-03	4.09E-02	6.76E-06	4.84E-02
Ecological scarcity 2006: Total	UBP	28'490	251'900	400	280'800



The relationship of the contributions made by the utilisation in comparison to those made by the reduction and disposal depends on the intensity of the utilisation (utilisation scenario).

**Product:**

The device must be disposed of as waste from electrical and electronic equipment (electrical/electronic scrap) and must not be disposed of as household waste. This applies in particular to the assembled PCB.

It is possible that special treatment for special components is compulsory by law or makes ecological sense.

Packaging:

Recyclable

The local and currently valid laws (WEEE2012/19/EU) must be observed.

Special information:

None

Remarks**⁽¹⁾ Depending on the fire load for the type:**

ASV215BF152D 6.0 MJ

ASV215BF152E 6.0 MJ

⁽⁴⁾ Depending on the weight of the type:

ASV215BF152D 692.7 g

ASV215BF152E 692.7 g

How the environment benefits

With these products we make a significant contribution to energy savings in buildings and to reducing global warming.

In the Green Building area, our products ensure that customer requirements are fulfilled optimally and that there is cost efficiency over the entire building life-cycle.

Extent of applicability

This declaration is an environmental declaration based on ISO 14025 and describes the environmental impact of the product over its entire life stage. The declaration is made in a compact form without an external check or registration.

The data gathered with existing data inventories for production processes has been evaluated from the ecoinvent 2.2 European database.

For the determination of the energy requirement during the utilisation phase of the product, standard HVAC applications and average climatic conditions in Switzerland were assumed, based on the ecological accounting for the corresponding product group.

**Disclaimer: This declaration is only for information purposes.**

Deviations from the information it contains can occur without being reported. Fr. Sauter AG explicitly rules out any liability for any consequences that may result due to the above information.



Your local SAUTER representative will provide further information on environmental aspects, and specifically on disposal.

References

Ecoinvent 2010 ecoinvent data v2.2, Swiss Centre for Life Cycle Inventories, Dübendorf

FOEN 2008 eco-balances: method of ecological scarcity – eco-factors 2006, FOEN