

SAUTER Declaration on materials and the environment

Product



Type	EY6LO00F001
Designation	modu600-LO
Product range	SAUTER modulo 6
Product group of eco-balance	Building management – HVAC

Manufacturer

Fr. Sauter AG
Im Surinam 55, CH-4058 Basel

Management system certified according to

	Since	With
ISO 9001:2015	10 Oct. 2018	SQS
ISO 14001:2015	10 Oct. 2018	SQS
ISO 45001:2018	10 Oct. 2018	SQS

Environmentally-compatible product design

Basis	Management system Fr. Sauter AG
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Process	Business process <ul style="list-style-type: none"> • Product innovation • Ecological accounting
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Product description	CE conformity, function, operation, maintenance, servicing	See: MD 91.141
Environmental risk	Fire protection according to Fire load Hazardous substances ¹ according to Hazardous substances ² according to Parts containing halogen (causing corrosive smoke) Liquids polluting the aquatic environment Explosive substances Transport hazardous goods class	EN 60695-2-11, EN 60695-10-2 0.6 MJ RoHS 2011/65/EU & 2015/863/EU compliant. Product category 9. REACH 1907/2006/ EC compliant. Printed circuit board None None None

Materials

	Total weight of product	42.3 g	Material Safety Data Sheet (MSDS)	EU waste code ³
Plastic				
PC		11.2 g	Yes	20 01 39
Other plastics, silicone rubber		0.5 g	Yes	20 01 39
Metal				
Bronze alloy		0.4 g	Yes	20 01 40
Printed circuit board				
PCB assembly,		7.9 g	Not required	20 01 36
Various				
1 pc. TFT display, (part of PCB assembly)		4.9 g	Not required	20 01 36
Packaging⁴				
Corrugated board		17.4 g		

¹ Only applies to electrical devices

² SVHC substances >0.1%w/w: see **Hazardous ingredients**

³ Directive 75/442/EEC and follow-on documents, ruling 2001/118/EC

⁴ Directive 94/62/EC, 2004/12/EC, 2005/20/EC, 2018/852/EC

Hazardous ingredients

SVHC ingredient		Name of the ingredient	Effective concentration per article, %w/w
CAS number	EN number		
7439-92-1	231-100-4	Lead, component circuit board	<8

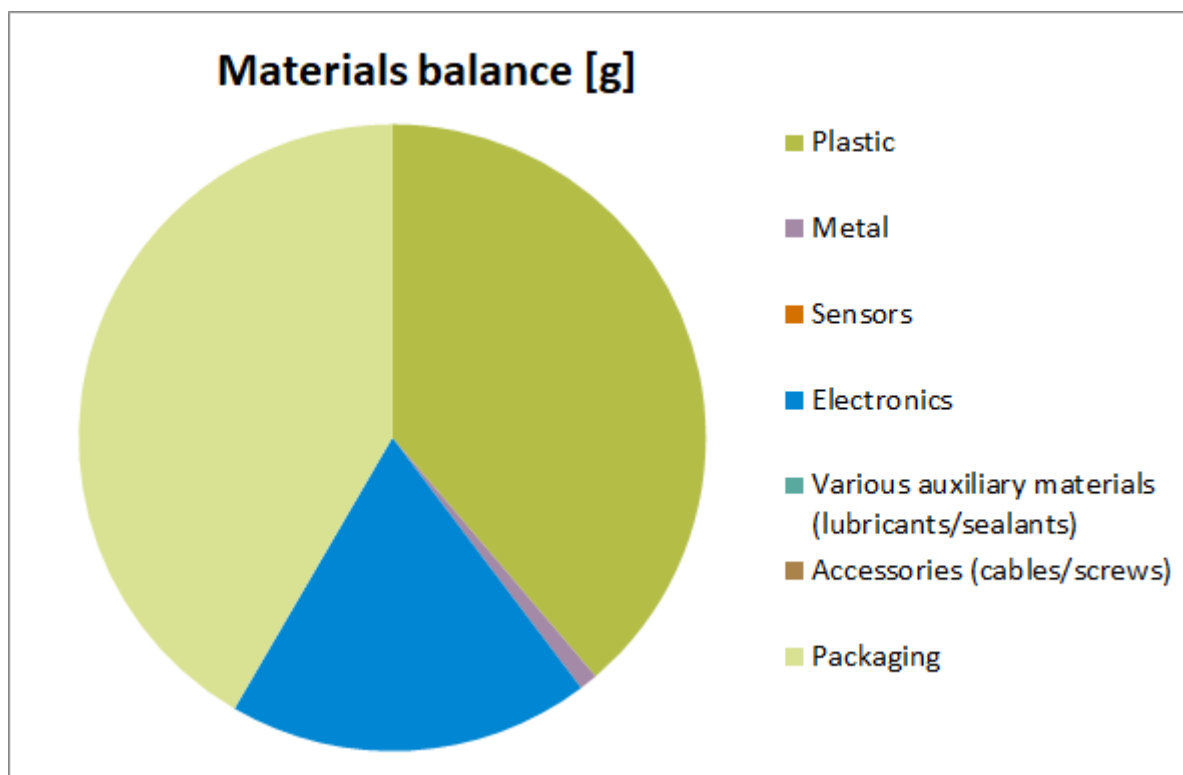
[Link to the candidate list of ECHA](#)



Note

The following materials balance and the calculation of the environmental impact relate to type EY6LO00F001

Materials balance



Energy requirement in the utilisation phase

Power requirement for component

Average power consumption 0.3 W

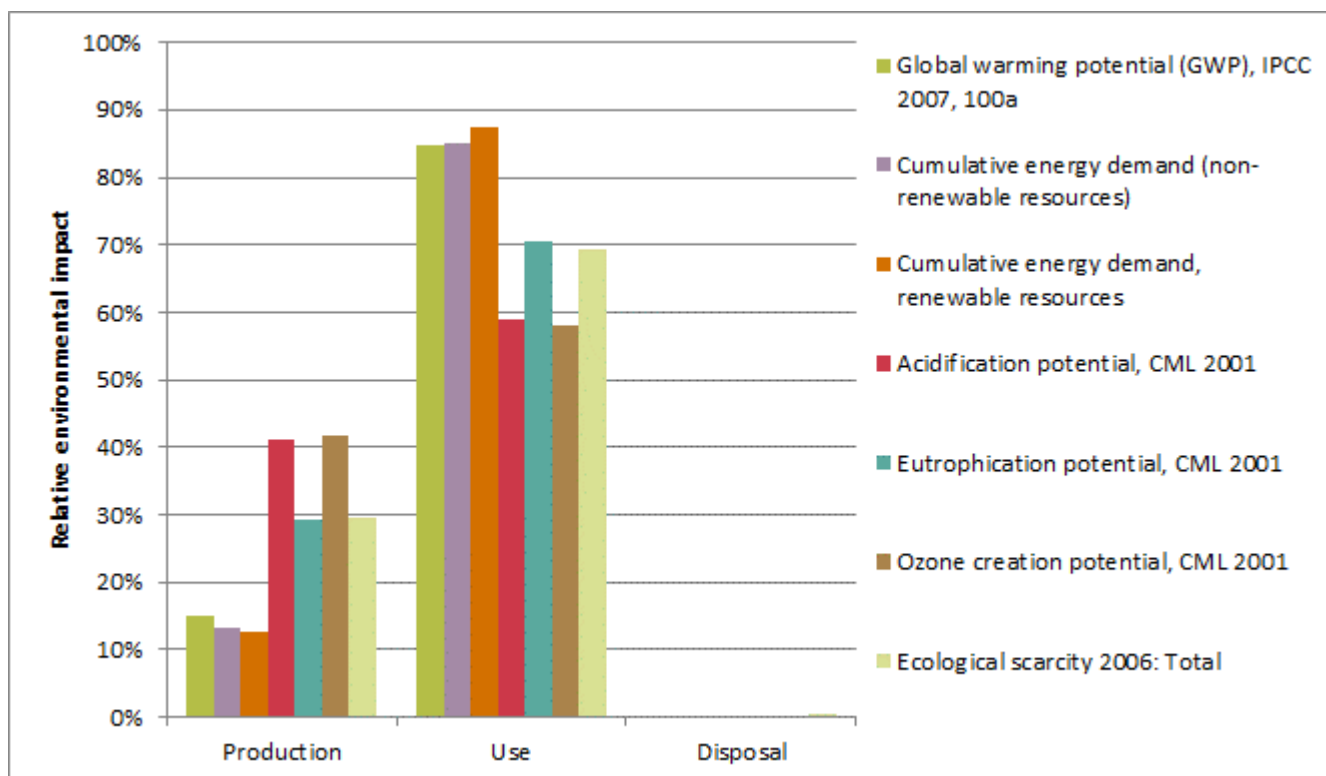
Typical energy consumption per year 2.6 kWh

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	Use	Disposal	Total
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	2	11.6	0.0	13.06
Cumulative energy demand (non-renewable resources)	MJ eq.	35	230	0.1	270
Cumulative energy demand, renewable resources	MJ eq.	2.5	18	0.00	20
Acidification potential, CML 2001	kg SO2 eq.	3.32E-02	4.76E-01	1.76E-05	8.09E-02
Eutrophication potential, CML 2001	kg PO4-- eq.	1.57E-02	3.79E-02	1.17E-05	5.36E-02
Ozone creation potential, CML 2001	kg C2H4 eq.	1.38E-03	1.92E-03	7.3E-06	3.30E-02
Ecological scarcity 2006: Total	UBP	5600	11800	60	17000



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.

Special treatment for special components may be compulsory by law or may make ecological sense.

WEEE (Waste Electrical and Electronic Equipment)

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

Battery:

If present and applicable, battery disposal fees will be paid by the importer. (See list of materials on page 2.)

Packaging:

Recyclable

How the environment benefits

With these products, we make a significant contribution to energy savings in buildings and to reducing climate change.

With only 0.3Wh energy consumption, the primary energy requirement is outstandingly low. Its resource-saving compact design and easy single-sort disassembly result in optimal sustainability with a life expectancy of 8 years.

The eco-balance becomes even more optimal with the use of energy from renewable sources.

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 for information purposes only.**

Deviations from the information it contains can occur without notification. 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