



**MD 91.102<sup>1</sup>**  
**MD 91.103<sup>2</sup>**  
**MD 91.103<sup>3</sup>**  
**MD 91.300<sup>4</sup>**

## SAUTER Declaration on materials and the environment



Type	EY6AS80F021 EY6AS60F011 EY6BM15F011 EY6RT30F001								
Designation	modu680-AS <sup>1</sup> modu660-AS <sup>2</sup> modu615-BM <sup>3</sup> modu630-RT <sup>4</sup>								
Product range	<b>SAUTER modulo 6</b>								
Product group of eco-balance	<b>Building management – HVAC</b>								
Manufacturer	Fr. Sauter AG Im Surinam 55, CH-4058 Basel								
Management system certified according to	<table border="0"> <thead> <tr> <th>Since</th> <th>With</th> </tr> </thead> <tbody> <tr> <td>ISO 9001:2015</td> <td><b>10 Oct. 2018</b>    <b>SQS</b></td> </tr> <tr> <td>ISO 14001:2015</td> <td><b>10 Oct. 2018</b>    <b>SQS</b></td> </tr> <tr> <td>ISO 45001:2018</td> <td><b>10 Oct. 2018</b>    <b>SQS</b></td> </tr> </tbody> </table>	Since	With	ISO 9001:2015	<b>10 Oct. 2018</b> <b>SQS</b>	ISO 14001:2015	<b>10 Oct. 2018</b> <b>SQS</b>	ISO 45001:2018	<b>10 Oct. 2018</b> <b>SQS</b>
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### Environmentally-compatible product design

Basis Management system  
Fr. Sauter AG

Process Business process

- Product innovation
- Ecological accounting

<sup>1</sup> Type: EY6AS80F021  
<sup>2</sup> Type: EY6AS60F011  
<sup>3</sup> Type: EY6BM15F011  
<sup>4</sup> Type: EY6RT30F001

<b>Product description</b>	CE conformity, function, operation, maintenance, servicing	See PDS 91.102 <sup>1</sup> , 91.103 <sup>2</sup> , 91.104 <sup>3</sup> , 91.300 <sup>4</sup>
<b>Environmental risk</b>	Fire protection according to Fire load Hazardous substances <sup>5</sup> according to  Hazardous substances <sup>6</sup> 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 6.4 MJ <sup>1, 4</sup> / 5.9 MJ <sup>2</sup> / 6.4 MJ <sup>3</sup> RoHS 2011/65/EU & 2015/863/EU compliant. Product category 9. REACH 1907/2006/ EC compliant. <b>Printed circuit board</b>  <b>None</b>  <b>Battery / CR2032</b> (danger only if used improperly)  <b>ADR: 9 M4 (E), IATA: UN3091</b>

## Materials

	Total weight of product	280 g <sup>1, 3, 4</sup> / 260.8 g <sup>2</sup>	Material Safety Data Sheet (MSDS)	EU waste code <sup>7</sup>
<b>Plastic</b>				
PA66		4.0 g	Yes	20 01 39
PC		85.6 g	Yes	20 01 39
Other plastics (<5% total weight)		14.0 g	Yes	20 01 39
<b>Metal</b>				
Steel of different alloys		2.6 g	Not required	20 01 40
Copper of different alloys		0.1 g	Not required	20 01 40
<b>Printed circuit board</b>				
PCB assembly		146.6 g	Not required	20 01 36
<b>Packaging<sup>8</sup></b>				
Corrugated board PAP20		16.0 g	Not required	20 01 01
Paper PAP22		8.0 g	Not required	20 01 01
<b>Special components</b>				
Lithium battery CR2032 (part of assembled basic circuit board)		2.8 g	Yes	20 01 34

<sup>1</sup> Type: EY6AS80F021

<sup>2</sup> Type: EY6AS60F011

<sup>3</sup> Type: EY6BM15F011

<sup>4</sup> Type: EY6RT30F001

<sup>5</sup> Only applies to electrical devices

<sup>6</sup> SVHC substances >0.1%w/w: see **Hazardous ingredients**

<sup>7</sup> Directive 75/442/EEC and follow-on documents, ruling 2001/118/EC

<sup>8</sup> 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		
110-71-4	203-794-9	Ethylene glycol dimethyl ether (EGDME), 1,2-Dimethoxyethane	1 – 3.5
7439-92-1	231-100-4	Lead	<8

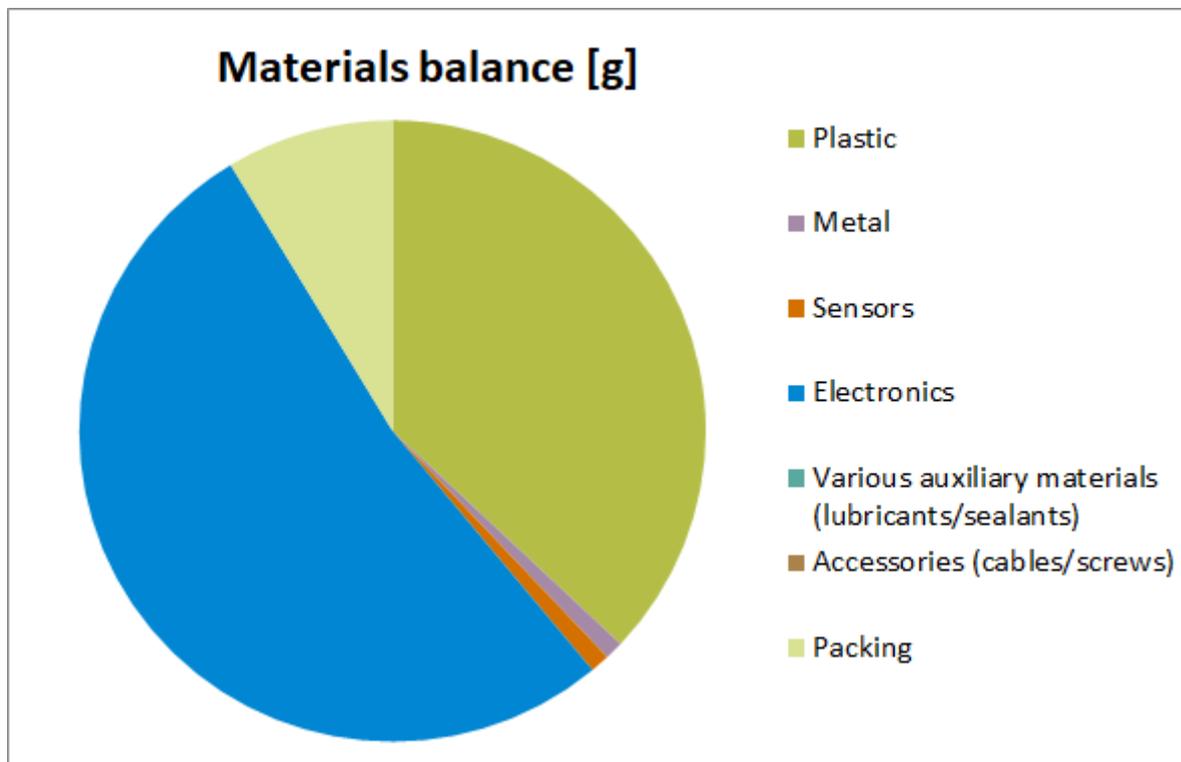
[Link to the candidate list of ECHA](#)



### Note

The following materials balance and the calculation of the environmental impact relate to type EY6AS80F021

## Materials balance



## Energy requirement in the utilisation phase

Power requirement for component

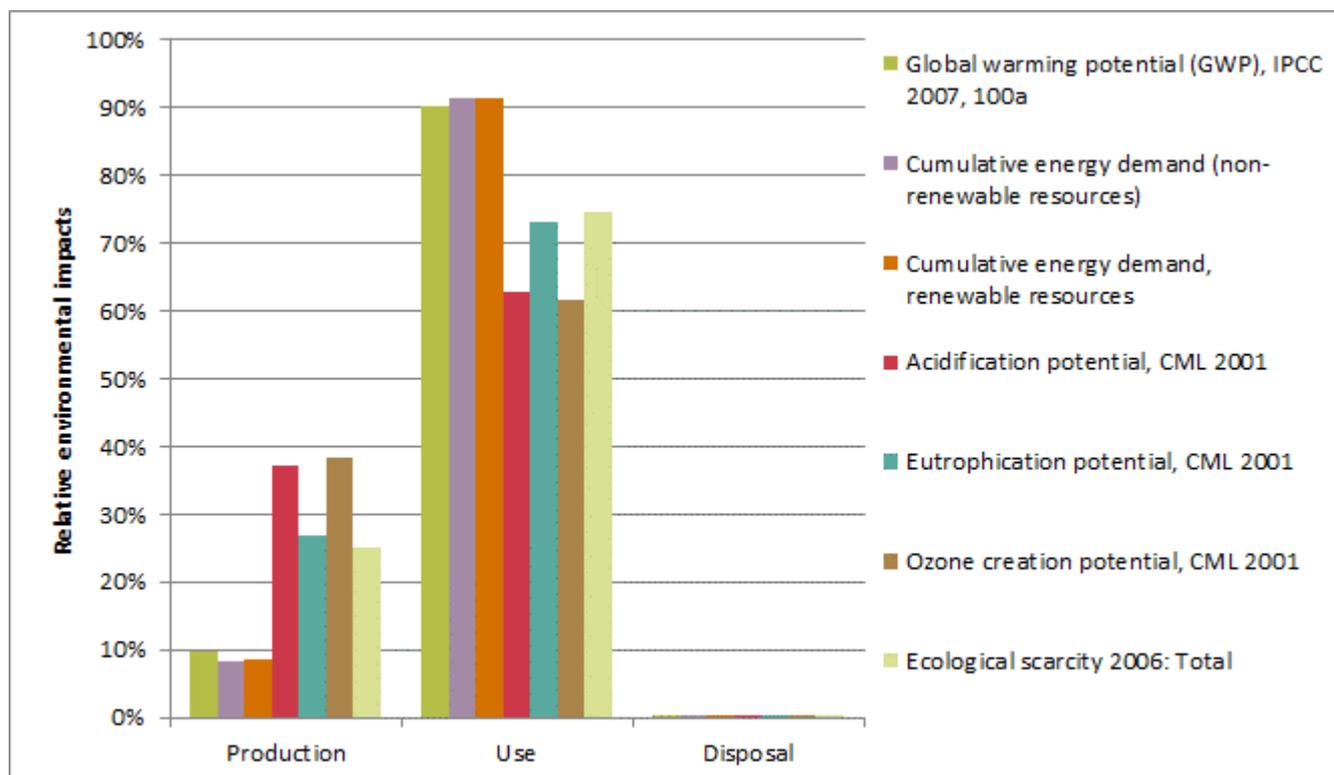
Max. power consumption	3.0 W
Typical energy consumption per year	25.6 kWh

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.	16.5	154.1	0.2	170.8
Cumulative energy demand (non-renewable resources)	MJ eq.	285	3,120	1.4	3,410
Cumulative energy demand, renewable resources	MJ eq.	21.9	237	0.02	259
Acidification potential, CML 2001	kg SO2 eq.	3.76E-01	6.35E-01	2.60E-04	1.01E+00
Eutrophication potential, CML 2001	kg PO4-- eq.	1.86E-01	5.05E-01	1.32E-04	6.91E-01
Ozone creation potential, CML 2001	kg C2H4 eq.	1.58E-02	2.56E-02	1.16E-05	4.14E-02
Ecological scarcity 2006: Total	UBP	52,900	157,300	880	211,000



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).



## Disposal

### 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

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## How the environment benefits

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

With only 3Wh energy consumption in basic operation, 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.

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## 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

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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