

MD 91.111<sup>1</sup> MD 91.116<sup>2</sup> MD 91.121<sup>3</sup> MD 91.126<sup>4</sup> MD 91.131<sup>5</sup> MD 91.136<sup>6</sup>

# SAUTER Declaration on materials and the environment Product

	Туре	EY6IO30F001, EY6IO31F001 EY6IO50F001, EY6IO70F001 EY6IO71F001, EY6IO72F001		
	Designation	modu630-IO¹, mo modu650-IO³, mo modu671-IO⁵, mo	odu670-IO <sup>4</sup> ,	
	Product range	SAUTER modulo	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	Basis	Management syste	em	
product design		Fr. Sauter AG		
	Process	Business process		
		<ul><li> Product innovati</li><li> Ecological according</li></ul>		

<sup>&</sup>lt;sup>1</sup> Type: EY6IO30F001

- <sup>2</sup> Type: EY6IO31F001
- <sup>3</sup> Type: EY6IO50F001
- <sup>4</sup> Type: EY6IO70F001
- <sup>5</sup> Type: EY6IO71F001
- <sup>6</sup> Type: EY6IO72F001

	See:
function, operation, maintenance, servicing	MD 91.111 <sup>1</sup> , MD 91.116 <sup>2</sup> , MD 91.121 <sup>3</sup> , MD 91.126 <sup>4</sup> , MD 91.131 <sup>5</sup> , MD 91.136 <sup>6</sup>
Fire protection according to	EN 60695-2-11, EN 60695-10-2
Fire load	4.3 MJ <sup>1,2,4,5,6</sup> / 3.3 MJ <sup>3</sup>
Hazardous substances <sup>7</sup> according to	RoHS 2011/65/EU & 2015/863/EU compliant. Product category 9.
Hazardous substances <sup>8</sup> according to	REACH 1907/2006/ EC compliant.
Parts containing halogen (causing corrosive smoke)	Printed circuit board
Liquids polluting the aquatic environment	None
Explosive substances	None
Transport hazardous goods class	None
	servicing Fire protection according to Fire load Hazardous substances <sup>7</sup> according to Hazardous substances <sup>8</sup> according to Parts containing halogen (causing corrosive smoke) Liquids polluting the aquatic environment Explosive substances

#### **Materials**

	Total weight of product	157.3 g <sup>1,2,4,5,6</sup> / 140.5 g <sup>3</sup>	Material Safety Data Sheet (MSDS)	EU waste code9
Plastic				
PA66		3.7 g	Yes	20 01 39
PC		40.2 g	Yes	20 01 39
Other plastics, termina	als – PBT	52.6 g	Yes	20 01 39
Metal				
-				
Printed circuit board				
PCB assembly,		36.8 g	Not required	20 01 36
Various				
-				
Packaging <sup>10</sup>				
Corrugated board		24 g		

<sup>1</sup> Type: EY6IO30F001

<sup>2</sup> Type: EY6IO31F001

<sup>3</sup> Type: EY6IO50F001

<sup>4</sup> Type: EY6IO70F001

<sup>5</sup> Type: EY6IO71F001

<sup>6</sup> Type: EY6IO72F001

<sup>7</sup> Only applies to electrical devices

<sup>8</sup> SVHC substances >0.1%w/w: see Hazardous ingredients

<sup>9</sup> Directive 75/442/EEC and follow-on documents, ruling 2001/118/EC

<sup>10</sup> Directive 94/62/EC, 2004/12/EC, 2005/20/EC, 2018/852/EC

## Hazardous ingredients

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

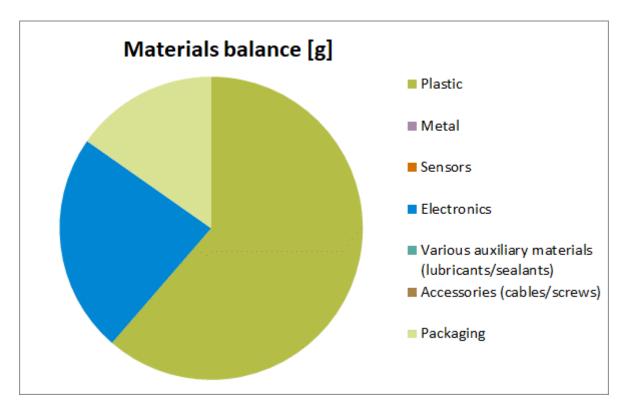
Link to the candidate list of ECHA

#### Note

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The following materials balance and the calculation of the environmental impact refer to type EY6IO30F001, analogous to EY6IO31F001, EY6IO70F001, EY6IO71F001, EY6IO72F001

#### **Materials balance**



### Energy requirement in the utilisation phase

Power requirement for component

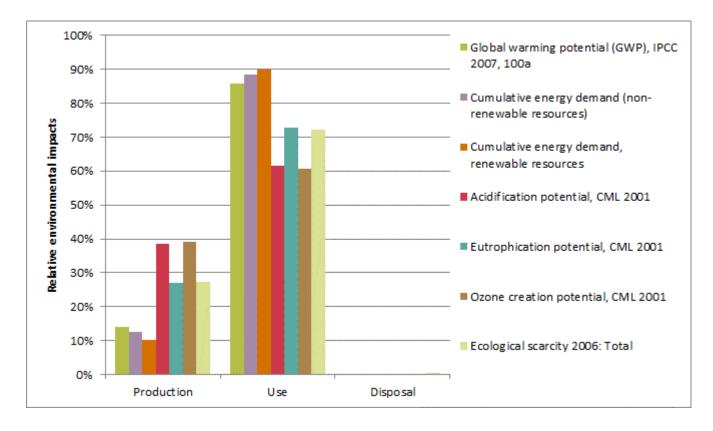
Average power consumption	1.25 W
Typical energy consumption per year	11.0 kWh

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.	7.8	48.1	0.1	56.1
Cumulative energy demand (non-renewable resources)	MJ eq.	138	980	0.4	1110
Cumulative energy demand, renewable resources	MJ eq.	8.4	74	0.00	82
Acidification potential, CML 2001	kg SO2 eq.	1.24E-01	1.98E-01	7.92E-05	3.23E-01
Eutrophication potential, CML 2001	kg PO4 eq.	5.87E-02	1.58E-01	5.25E-05	2.17E-01
Ozone creation potential, CML 2001	kg C2H4 eq.	5.16E-03	7.98E-03	3.26E-06	1.31E-02
Ecological scarcity 2006: Total	UBP	18,600	49,100	260	68,000



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).

	Product:
Disposal	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 ir buildings and to reducing climate change.
	With only 1.25Wh energy consumption, the primary energy requirement is outstandingly low. Its resource-saving compact design and easy single-sor 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.



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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