Environmental declaration Type II

GENERAL PRODUCT INFORMATION

Product name	*Packaging*
TG-R430 TG-R4/PT1000	Cardboard

COMPANY INFORMATION

Company, address and telephone

AB REGIN
Box 116
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Sweden

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Company description

AB Regin develops and markets controllers, transmitters and components for ventilation and indoor climate control.

AB Regin has a certified quality assurance system according to ISO 900I.

Ongoing environmental work

Regin designs products on commission as well as for resale. Regin has no production of its own and has therefore no product-related environmental policy. Regin can control environmental aspects related to product development and when choosing suppliers and components.

AB Regin intend to begin working with environmental certification according to ISO 14 001.
AB Regin intend to gradually start developing MVD Type II (Regin's own environmental declaration) for our products.

PRODUCT INFORMATION

General

The recommended field of application is stated in the technical documentation.
There is an unambiguous and lasting label (manufacturer, product name, serial number etc) on the product.
The labelling is linked to the technical documentation which makes the product clearly identifiable.

Product design

The product consists of a assembled circuit board mounted in a plastic cover. The cover consists of a base and a lid. The potentiometer has a plastic knob

Component modules	Weight grams	Weight %
Circuit board with components	23	32
Plastic cover + knob	50	68

PRODUCT INFORMATION, RESOURCES AND HAZARDOUS SUBSTANCES

Component modules	**Resources** (metals, organic, non-organic substances)	**Hazardous substances** (Kd, Hg, Pb, PCB, PVC, PBB, PBBE etc)
Assembled circuit boards	***Epoxy, glass fibre, Si, Cu, Fe, Sn, Au, Ag***	***flame retardants***
Plastic cover + knob	***PC/ABS copolymer***	
Notes, the product's content		

PRODUCTION

The components are mounted manually and are thereafter soldered together with classified soldering. The environmental consequences are negligible and consist solely of air outlet from soldering
The operation does not require licencing

DISTRIBUTION

Production origin	Hultsfred, Sweden
Mode of transportation	Lorry, train
Mode of distribution	The product is normally distributed via a warehouse/wholesaler.
Material used for packaging	Wood, paper, plastic
Packaging material cannot be returned. AB Regin is connected to REPA.	

BUILDING PHASE

Documented instructions for mounting and commissioning are included with the product.
The instructions contain recommendations concerning

- Safeguard measurement for handling procedures and mounting.
- Handling of the product at the workplace and during mounting.

USAGE PHASE

Normal operation

The product does not require surplus energy (electricity) during normal operation.
The product does not have any environmental impact on the surrounding environment during normal operation.
Normally, the product does not require any maintenance.
It is possible to estimate the products life span in advance.
There is no documentation concerning the expected life span when the product is under different conditions.
Documented instructions for appropriate operation and maintenance are supplied with the product.

Emergency

In case of fire the plastic may emit gases harmful to human health. The amounts of these substances are small compared with the size of the product.
Circuit boards may emit toxic flue gases.

DEMOLITION

The product is prepared for environmental-friendly dismantling.
Dismantling of the product:

1. Remove the lid by pressing the long plastic tab, located at the lower end of the bottom part, and pulling the lid outwards.
2. Remove the circuit board by pressing one of the long plastic tabs, at the lower end of the bottom part, downwards while the circuit board is pulled outwards.
3. Remove the knob from the potentiometer.

WASTE MANAGEMENT

The long life span of the product means that the recycling procedures may differ from today when the product is recycled.
The product is required, by law, to be handled according to standard waste management procedures. The materials can easily be separated to a high separation degree.

The cover and the knob are made of PC/ABS and can, theoretically, be recycled. Recovering of energy through combustion is considered the best option in the present situation, since the plastic does not contain any substances dangerous to the environment.

Circuit boards with components are required by law to be dismantled and constituent components to be identified. Swedish companies in electronic recycling separate in three main fractions. Recycling of materials, recovering of energy and dangerous waste.
Identified metallic constituents are returned to metal recycling.
Combustible materials are returned for safe disposal in a licenced incinerator.
Dangerous waste is returned for destruction to a licenced entrepreneur.