Printed: 2014-10-31

Environmental declaration Type II

GENERAL PRODUCT INFORMATION

Name of product series RCF(M)-230 (AD; CAD; CD; CTD;D; TD; /N)-EC

Packaging Cardboard

COMPANY INFORMATION

Company, address and telephone

AB REGIN Box 116 SE-428 22 Kållered Sweden Tel: +46 – (0)31 – 720 02 00 Fax: +46 – (0)31 – 94 01 46 E-mail:

Company description

Regin is the collected trademark for products and systems in building automation. The company's knowledge is based on many years of wide experience in control, automation and flow control.

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

Ongoing environmental work

Regin designs products on commission from clients as well as for resale. Regin has no production of its own and has thereby no product related consequences for the environment. 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

RCF (M) -230 is a controller platform for fan coil applications. In its simplest form an electronic thermostat and in a more complex form a controller for thermal or 3-point actuators.

| Component modules | Weight grams | Weight % |
|-------------------|-----------------|-------------|
| PCB Assembled | 87 | 48 |
| Casing | 70 | 39 |
| Terminals | 22 | 12 |
| Screws | <1 | 1 |

Tel: 031 - 720 02 00 Fax: 031 - 94 01 46 www.regin.se, info@regin.se



THE CHALLENGER IN BUILDING AUTOMATION

PRODUCT INFORMATION, RESOURCES AND HAZARDOUS SUBSTANCES

| Component modules | Resources (metals, organic, non- organic substances) | Hazardous substances (Kd, Hg, Pb, PCB, PVC, PBB, PBBE etc) |
|-------------------|---|---|
| PCB A | Epoxi, Cu, Ag, TBBP-A Fe, Sn | TBBP-A |
| Casing | PC | |
| Terminals | PA66, Cu, Sn | |
| Screws | Fe, Sn | |

Notes, the product's content

PRODUCTION

Regin has no production of its own and has therefore no product related environmental policy.

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 Sweden, Philippines Mode of transportation Lorry, train, boat, airplane Mode of distribution The product is normally distributed via a warehouse/wholesaler. Wrapping Material Wood, paper, plastic Packaging material can not 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. •

Tel: 031 - 720 02 00 Fax: 031 - 94 01 46 www.regin.se, info@regin.se



THE CHALLENGER IN BUILDING AUTOMATION

RCF(M)-230 all models_MVD_eng.doc Page 3 of 3 Created: 2003-03-02

Printed: 2014-10-31

USAGE PHASE

Normal operation

The product requires energy (electricity) during normal operation. Power consumption approx. 15 VA.

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 product's 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. The casing is opened with a screwdriver.
- 2. The assembled PCB is fastened by 4 screws.
- 3. The terminals are snapped into the bottom casing.

WASTE MANAGEMENT

The long life span of the product means that the recycling situation 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.

Plastic parts 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.

Tel: 031 - 720 02 00 Fax: 031 - 94 01 46 www.regin.se, info@regin.se



THE CHALLENGER IN BUILDING AUTOMATION