

**EXOflex
Environment Declaration
of Products**

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General

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EXOflex has been developed to be as little harmful to the environment as possible, during manufacturing, during use, and after its lifetime. To ensure this, EXOflex has gone through the processes below.

Processes

AB Regin is certified according to ISO9001:2000. In this quality system there are parts that normally are in the environmental management system ISO14000. During the development and production phases, considerations are made not only to quality aspects, but also to environmental aspects, which are described below in a life cycle approach.

Development Processes

One main construction goal for Regin is to make back compatible constructions. From an environmental point of view, this means that when a new control system from Regin is introduced, it can co-exist with the old system. Normally installations are built gradually, and the customer can by choosing products from Regin, keep already made investments and thus take advantage of the fact that the product has a calculated lifetime of at least 10 years.

During the development process, there are a number of rules that limit the choice of components that are harmful to the environment. The chemical inspection's OBS and limitation lists are used as a reference for this. To comply with legislative demands, and simultaneously take maximum environmental considerations, the least harmful brominated flame protection agents are used in plastic details. Concerning the RoH directive about demands regarding limitation of the use of components containing lead and chromium, most of our components are now lead-free. For the present, we refer to exceptions from this directive until there is a functioning alternative.

The development process includes taking care of making the products require as little maintenance as possible, and when maintenance is needed it should be as simple and environment friendly as possible.

The development process also includes taking into account that the recycling of the products should be as simple and environment friendly as possible.

Production Processes

Regin has no production. Most of our products are produced in Sweden under severe supervision.

The Use Phase

Maintenance

Normally no maintenance is required. The battery for memory backup has to be exchanged every 5 years at most. The battery is placed in a holder on the power PIFA EP1011.

Battery backup of CPU memory and Real Time Clock Lithium cell (min. 5 years)
button celltype CR2032

Exhaust

EXOflex gives no environmental effects on air or water during normal use.

Fire

In case of fire, use CO2 or other by fire authority recommended fire-fighting agent for electronics. Toxic fumes can be exhausted at burning.

Service

If the unit stops working, the whole unit or a part or it is sent to Regin for service. Resellers take care of this.

Packings

Packing materials are handled by REPA, which Regin is associated with and pays environmental fee.

End Handling, Recycling

EXOflex is optimized for environment friendly recycling. This has been achieved by modular design of the product, that is by dividing it in functional units that, if an error occurs, easily can be replaced or upgraded during the product's lifetime. When the product has served its time, it can easily be fragmented in its parts. Then some parts can be reused, or alternatively be recycled.

-PCBs are handled as electronic waste according to valid regulations for hazardous waste.

-plastic of the type polylac ABS with environmental approved flame protection agents, according to the below declaration of contents, are handled according to existing rules for waste that is harmful to the environment.

Declaration of Contents

Component	Description	EH10, weight g	EH20, weight g	EH30, weight g	EH40, weight g	Comment
Plastic:						
-End-wall, shell, cover, separator and handle	Polylac-ABS VOX with flame protection agent of the type Tetrabrombisphenol. Color: gray	124	205	233	260	Flame safe. Granules from Polykemi in Ystad. Do not contain glass fibres.
-Card holder	Polycarbonate	9	18	28	37	For signal descriptions
-Plate on handle.	Polyester. Color: blue	1	1	1	1	
Circuit board, PCB	FR4	69	134	203	271	4 Cu layers
Metal:						
-Aluminium	Anodised Al	169	355	522	697	Frame
-Steel		4	4	4	4	4 screws in end-walls
Total weight		376	717	991	1270	

Component	Description	EP1004, weight g	EP1011, weight g	EP2032, weight g	EP3016 weight g	Comment
Plastic:						
-Cover	Polyester. Color: blue	1	1	1	1	Cover at connector
-Label	Metallized polyester	<1	<1	<1	<1	Connection instruction UL & cUL classified
-Front plate	Polyester. Color: blue	1	1	1	1	
Circuit board, PCB	FR4	130	188	172	122	Solder lead: SnPb 63/37 4 Cu layers
Metal:						
-Aluminium	Anodised Al	44	44	44	44	PIFA profile
-Steel		1	1	1	1	2 screws
Total weight		178	236	220	170	

Component	Description	EP4024, weight g	EP5012, weight g	EP6012, weight g	Comment
Plastic:					
-Cover	Polyester. Color: blue	1	1	1	Cover at connector
-Label	Metallized polyester	<1	<1	<1	Connection instruction UL & cUL classified
-Front plate	Polyester. Color: blue	1	1	1	
Circuit board, PCB	FR4	153	157	143	Solder lead: SnPb 63/37 4 Cu layers
Metal:					
-Aluminium	Anodised Al	44	44	44	PIFA profile
-Stål		1	1	1	2 screws
Total weight		201	205	191	

Component	Description	EP7218, weight g	EP7408, weight g	EP7416, weight g	EP8101, weight g	Comment
Plastic:						
-Cover	Polyester. Color: blue	1	1	1	1	Cover at connector
-Label	Metallized polyester	<1	<1	<1	<1	Connection instruction UL & cUL classified
-Front plate	Polyester. Color: blue	1	1	1	1	
Circuit board, PCB	FR4	166	185	144	100	Solder lead: SnPb 63/37 4 Cu layers
Metal:						
-Aluminium	Anodised Al	44	44	44	44	PIFA profile
-Steel		1	1	1	1	2 screws
Total weight		214	233	192	148	

Component	Description	EP8102, weight g	EP8210, weight g	EP8282, weight g		Comment
Plastic:						
-Cover	Polyester. Color: blue	1	1	1		Cover at connector
-Label	Metallized polyester	<1	<1	<1		Connection instruction UL & cUL classified
-Front plate	Polyester. Färg, blå	1	1	1		
Circuit board, PCB	FR4	190	94	85		Solder lead: SnPb 63/37 4 Cu layers
Metal:						
-Aluminium	Anodised Al	44	44	44		PIFA profile
-Steel		1	1	1		2 screws
Total weight		238	142	133		

Component	Description	ED9200, weight g	Comment
Plastic:			
-Border and back cover	Polylac-ABS VOX with flame protection agent of the type Tetrabrombisphenol. Color: blue	96	Flame safe. Granules from Polykemi in Ystad. Do not contain glass fibres
-Overlay		15	
-Label	Metallized polyester	<1	Connection instruction. UL & cUL classified
Circuit board, PCB	FR4	134	4 Cu layers. There is an LCD display on the circuit board
Metal:			
-steel	screws	10	10 screws in the back plate
Total weight		257	

Component	Description	ECX1, weight g	Comment
Circuit board, PCB	FR4	102	Processor card with 4 Cu layers
Total weight		102	