



Technical documentation | October 2013

Environmental product information

Contactors type AF116 ... AF146

General

The AF116 ... AF146 family is made to respond successfully to all plant engineering requirements, from the standard ones to the most technologically advanced ones.

Date published: 2013-09-21

The AF116 ... AF146 product family is manufactured in Sweden.

The manufacturing site is certified according to ISO 9001:2008, IRIS:2009, ISO 14001:2004, OHSAS 18001:2007 and SA 8000:2008.

Product Conformity & Compliance

Regulation EC 1907/2006 (REACH)

- AF116 ... AF146 do not contain any substances of very high concern as listed in “the Candidate list” provided by the European Chemical Agency, ECHA , according to the European REACH-regulation. Number of substances on the Candidate List: 144 (last updated: 20 June 2013)

Directive 2011/65/EU (RoHS) (former 2002/95/EC)

- According to our current best knowledge, the AF116 ... AF146 products are compliant with the European RoHS Directive 2011/65/EU and therefore do not contain any restricted substances exceeding the limitations in the directive. Restricted substances referred to in Article 4(1) and maximum concentration values tolerated by weight in homogeneous materials Lead (0,1 %) ,Mercury (0,1 %),Cadmium (0,01 %), Hexavalent chromium (0,1 %), Polybrominated biphenyls (PBB) (0,1 %), Polybrominated diphenyl ethers (PBDE) (0,1 %),

Directive 94/62/EC (Packaging and waste packaging)

Product Safety

Conformity assessment with the product Standards is carried out by third party tests laboratory (accredited by Sweden) in respect of the EN ISO/IEC 17025 European Standard, by the Swedish certification body Intertek Semko AB according to IECCE CB Scheme and CB Certificate has been issued.

Standard:

- EN 60947-4-1; UL 60947-4-1

EU Directives:

- Directive 2006/95/EC relating to Electrical Equipment designed for use within certain voltage limits. (OJ L 374 of 27 December 2006)
- Directive 2004/108/EC relating to electromagnetic compatibility and repealing Directive 89/336/EEC. (OJ L 390 of 31 December 2004)

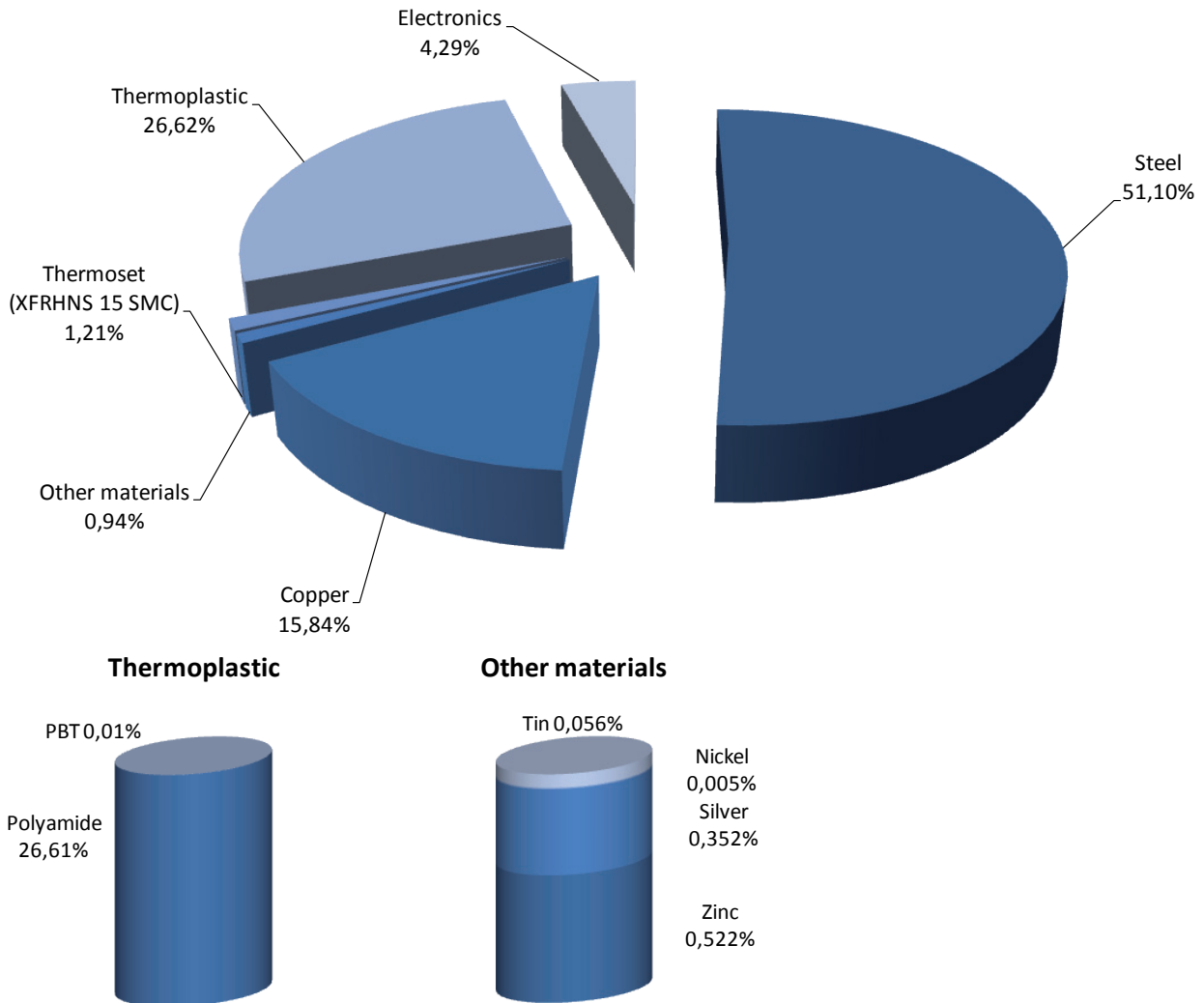
Certifications



Product Composition

The chart below shows the constituents of AF116 ... AF146. The total weight of the product is 1760 g excluding packaging.

(All materials ≥ 1 wt% , in accordance with IEC 62474 IEC)



Constituent substances

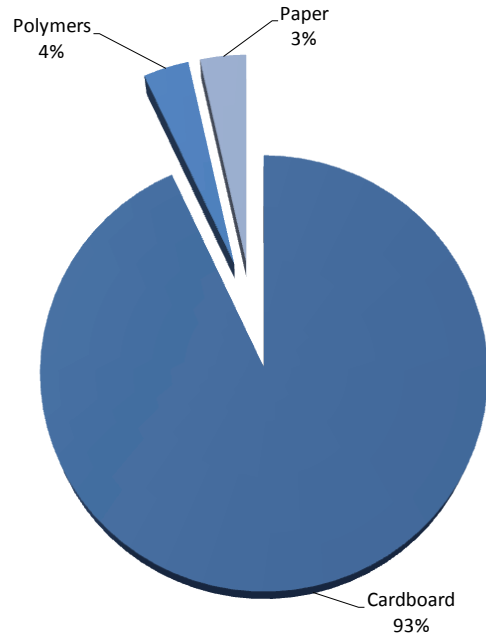
Constituent materials	Constituent substances	Weight %	Cas no / EG no
Pa6h2 G-20-v2hf	Melamine cyanurate	23,7%	37640-57-6 / 235-575-7
SMC XFRHNS 15	Styrene	1,2%	100-42-5 / 2002-851-5
LATAMID 68 H2-V0	-	1,3%	-
Ultradur	-	0,01%	-
DSM Akulon K225 KS PA6FR(30) Ral 7012	-	1,93%	-

Packaging

The total weight for AF116 ... AF146 packaging material is 148g. The chart provides information for each packaging material used.

The cardboard box and the paper used for the product manual are made of recycled fibers and are 100% recyclable.

The polymer films used are marked with the proper identification code and are recyclable.



Product Use

Standardized usage scenario: 3500 h per year, 20 years, 80 % load (prEN50598-3)

Losses: 10 W/pole at Ie/AC3 146 A +Coil holding 6 VA= 36 W

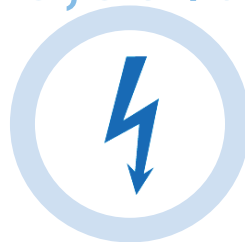
Rated operational power 75 kW

AF 146

2070 kWh

Power loss less than

0,05%



energy

(prEN 50598-2 Power losses of motor starters are lower than 0.1 %);

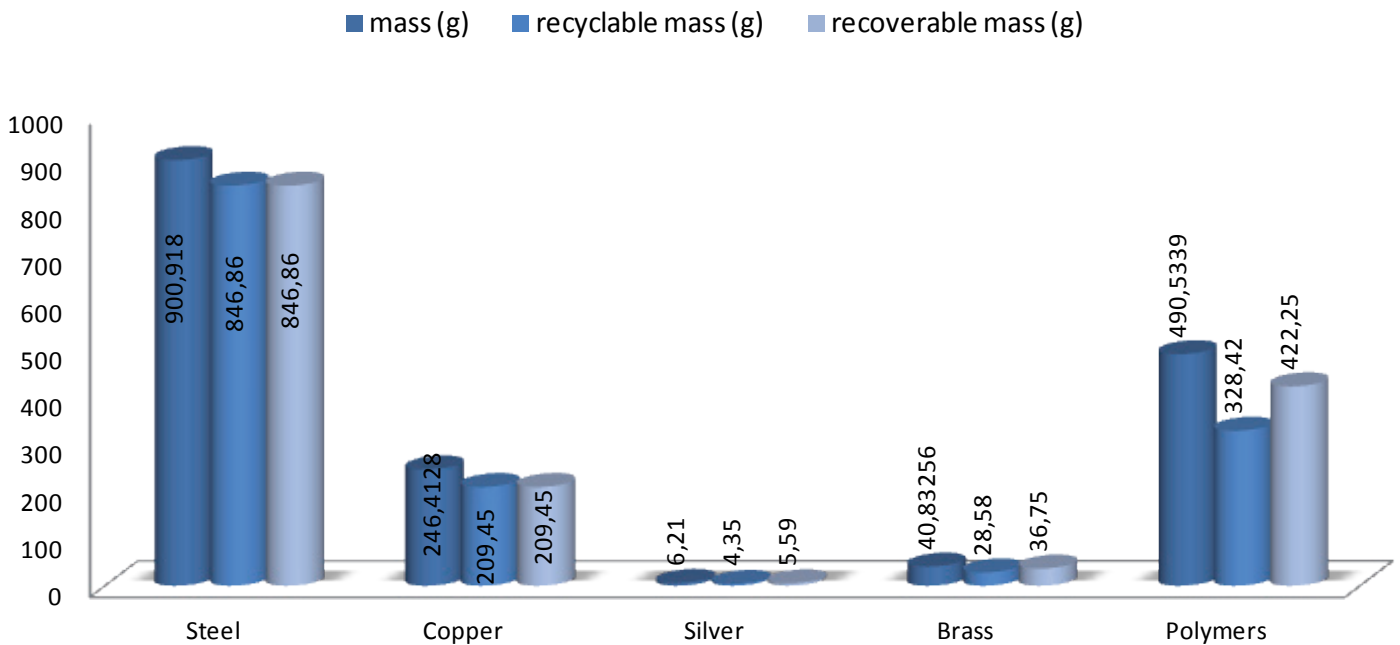
End-of-life

The recycling potential of AF116 ... AF146 is 84 %.

The metals and polymers recycling and recovery rate are shown below.

Ref IEC/TR 62635 Ed. 1.0

Recyclable and recoverable mass of main constituents



The recyclability and recoverability rate has been calculated based on the guidelines of the IEC/TR 62635 Edition 1.0 (2012-10-19)

Guidelines for end-of-life information provided by manufacturers and recyclers and for recyclability rate calculation of electrical and electronic equipment.

Recyclability Rate

84%



recycling

Recoverability Rate

90%



recovery

For the best recovery of the materials it is recommended to follow the scrapping instructions provided in the technical manual of AF116 ... AF146 at the product information portal (www.abb).

Contact us

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