

Primary switch mode power supply

CP-C.1 range



The high-performance CP-C.1 range power supplies are ABBs most advanced range. With excellent efficiency, high reliability and innovative functionality it is prepared for the most demanding industrial applications. ATEX as well as IECEx approvals are available for the use in hazardous areas.

Features

ABB's high-performance CP-C.1 power supplies for demanding industrial applications deliver high efficiency, high reliability and innovative functionality. This advanced range of power supplies has an integrated power reserve of up to 150 % continuously operate at an efficiency of up to 94 %. They come equipped with overheat protection and active power factor correction, combined with a broad certified AC and DC input voltage range and extensive worldwide approvals. Make CP-C.1 power supplies your preferred choice for professional DC applications.

Product conformity & compliance

REACH (Regulation EC 1907/2006)

ABBs CP-C.1 range power supplies and related accessories were classified as articles and, during normal and reasonably foreseeable conditions of use, do not intentionally release any substance or preparation.

ABB continuously undertakes communications throughout its supply chain in order to collect information about suppliers' compliance with REACH regulation.

SVHC (Regulation EC 1907/2006 REACH)

ABB continuously assesses its products for content of Substances of Very High Concern (SVHC), as included in the "Candidate List" by the European Chemicals Agency (ECHA). ABB publishes the data about the products that are having a part with SVHC in the SCIP database.

RoHS II

ABBs CP-C.1 range power supplies and related accessories are within the scope of Directive 2011/65/EU (RoHS II) and Amendment 2015/863, starting from July 22nd 2019.

WEEE

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is the European Community directive on waste electrical and electronic equipment (WEEE) which, together with the RoHS Directive, became European law in February 2003.

Product safety

Compliance with essential health and safety requirements has been assured by compliance with the applicable product and safety standards.

The validation according to the product and safety standards is carried out by third party tests laboratory (STIEE / TL030) in respect of the EN ISO/IEC 17025 European Standard, according to IECEE CB Scheme. CB certificate has been issued.

Standards:

- EN/IEC 61010-1
- EN/IEC 61010-2-201
- EN/IEC 61204
- UL 61010-1
- UL 61010-2-201
- CAN/CAS C22.2 NO 61010-1-12

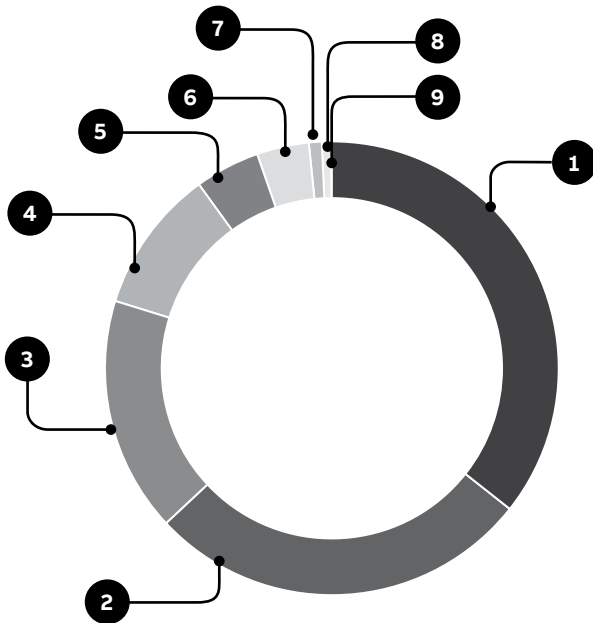
Directives:

- Low Voltage Directive No. 2014/35/EU
- EMC Directive No. 2014/30/EU
- RoHS Directive No. 2011/65/EU incl. 2015/863/EU

Material declaration

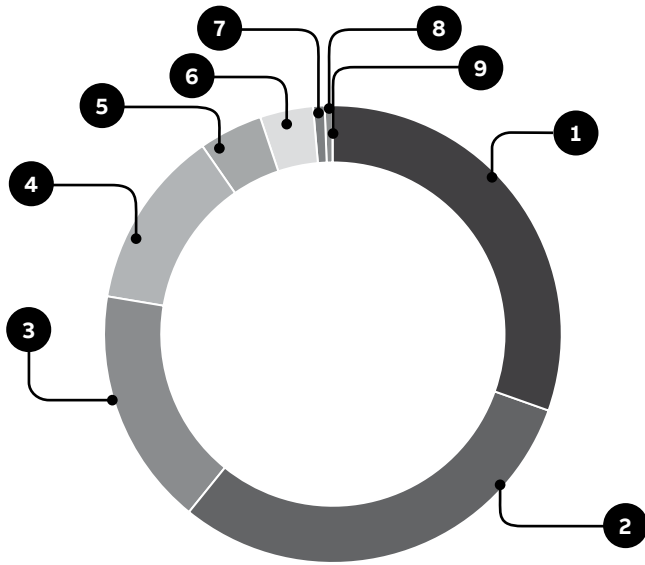
The charts below show the constituents of CP-C.1 range power supplies. The constituent materials are distributed as follows.

CP-C.1 24/5.0-x - 1SVR360563R1001/1SVR361563R1001/1SVR360563R2001.
The total weight of the product is 761.7 gr.



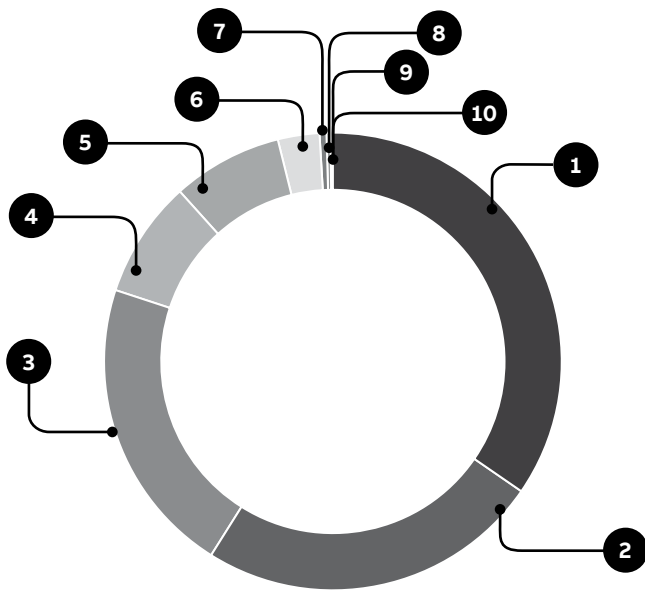
Material	% wt
1 PCBA	35.6 %
2 Aluminium alloy	27.4 %
3 Iron oxide	16.8 %
4 Steel	10.2 %
5 PA	4.6 %
6 Copper and Copper alloys	3.7 %
7 PTB	0.9 %
8 Epoxy resin	0.7 %
9 PC	0.04 %
TOTAL	100 %

CP-C.1 24/10.0-x - 1SV360663R1001/1SVR361663R1001/ 1SVR360663R2001.
The total weight of the product is 1,117.7 gr.



Material	% wt
1 PCBA	30.4 %
2 Aluminium alloy	30.4 %
3 Iron oxide	16.8 %
4 Steel	12.7 %
5 Copper and Copper alloys	4.5 %
6 PA	3.8 %
7 PTB	0.8 %
8 Epoxy resin	0.5 %
9 PC	0.03 %
TOTAL	100 %

CP-C.1 24/20.0-x - 1SVR360763R1001/1SVR361763R1001/1SVR360763R2001.
The total weight of the product is 1,666.0 gr.



Material	% wt
1 PCBA	34.6 %
2 Aluminium alloy	24.3 %
3 Iron oxide	21.1 %
4 Steel	8.3 %
5 Copper and Copper alloys	7.8 %
6 PA	2.9 %
7 Epoxy resin	0.5 %
8 PTB	0.3 %
9 Stainless steel	0.1 %
10 PC	0.02 %
TOTAL	100 %

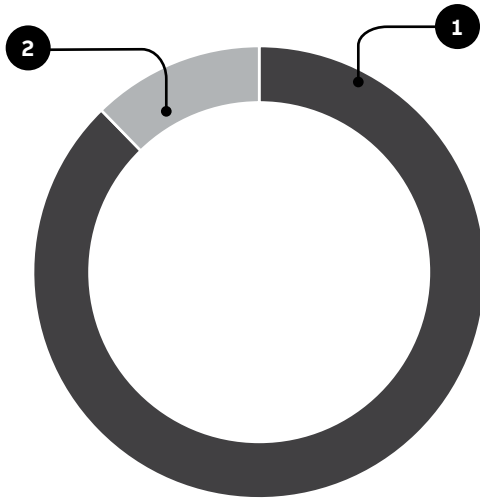
Plastic Materials	
PEI	Polyetherimide
FRP	Fibre-reinforced plastic
PBT	Polybutylene terephthalate
PAA	Polyacrylamide, polyacrylate
ABS	Acrylonitrile Butadiene Sterol
PA	Polyamide (PA6, PA66...)
BMC/SMC	Bulk Molding Compound/Sheet Molding Compound
PET	polyethylene terephthalate
MF	melamine-formaldehyde
PC	Polycarbonate
PC-BPA	Bisphenol-A-Polycarbonate
PET	Polyethylene terephthalate
PPA	Polyamide 61 / 6T; partly aromatic polyamide; Polyphthalamide
PPS	Polyphenylene sulphide
POM	Polyoxymethylene (Polyacetal resin; Polyformaldehyde)
Other thermoplastics	Combine different thermoplastics with very small volume
Precious Metal	Gold, Silver, Silver alloys, ...
Copper	
Gold	
Copper and Copper alloys	

Plastic Materials	
Copper alloys	Bronze, Brass
Other thermoset	Combine different thermoset with very small volume
Other plastics	Combine in case of different plastics with very small volume
Silver	
Metals	
Silver alloys	
Steel	
Stainless steel	
Rubber	
NRB	Nitrile rubber
CR	Chloroprene rubber
HNBR	Hydrogenated Nitril Rubber
Paper	
PCBA	Printed circuit boards
Wood	
Plastic	
FKM	Flourinated Rubber
Packaging	
Other	
Card box	

Packaging

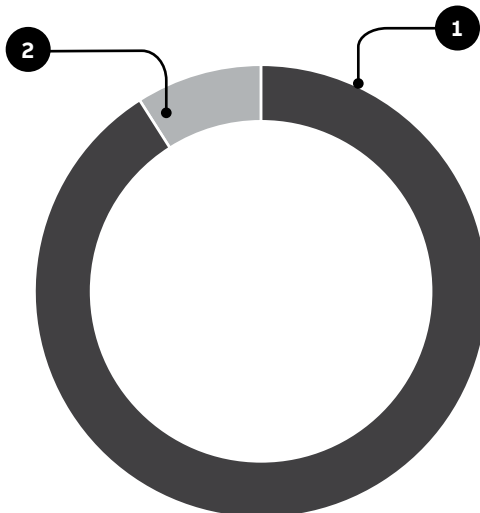
The charts below provide information for each packaging material used. The cardbox and the paper used for the product material are made of recycled fibers and are 100% recyclables. The polymer films used are marked with the proper identification code and are recyclable.

CP-C.1 24/5.0 ...-L...-C Packaging material composition: total weight = 120.2 gr.



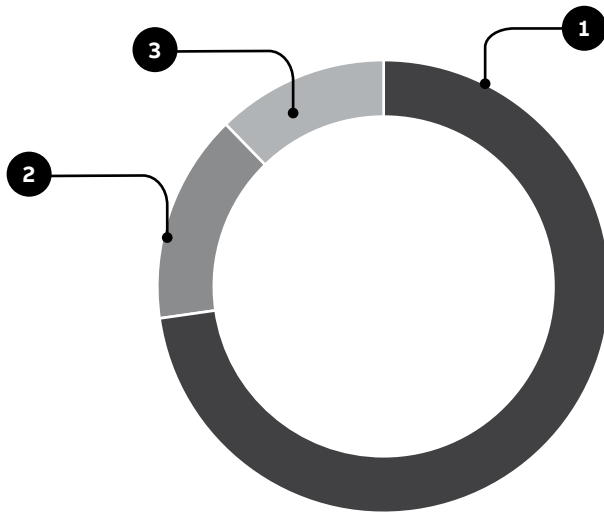
Material	% wt
① Cardbox	89.5 %
② Paper	10.5 %
Plastics	0 %
TOTAL	100 %

CP-C.1 24/10.0 ...-L ...-C Packaging material composition: total weight = 139.8 gr.



Material	% wt
① Cardbox	91.0 %
② Paper	9.0 %
Plastics	0 %
TOTAL	100 %

CP-C.1 24/20.0 ...L ...C Packaging material composition: total weight = 104.2 gr.



Material	% wt
① Cardbox	72.7 %
② Paper	15.0 %
③ PE foam	12.3 %
Plastics	0 %
TOTAL	100 %

Product use



Energy

Power losses for power supplies CP-C.1 are indicated in the following table

Type	Power loss (W/device)
CP-C.1 24/5.0 /(-L)/(-C)	12
CP-C.1 24/10.0 /(-L)/(-C)	16
CP-C.1 24/20.0 /(-L)/(-C)	28

End-of-life

At the end of operating life, constituent components of CP-C.1 (-L/-C) range power supplies have been optimized in order to reduce waste amount and increase recovery of the material. Metals and polymers contained into CP-C.1 (-L/-C) range power supplies are characterized by high recycling rates. Most plastic parts are marked for easy sorting.