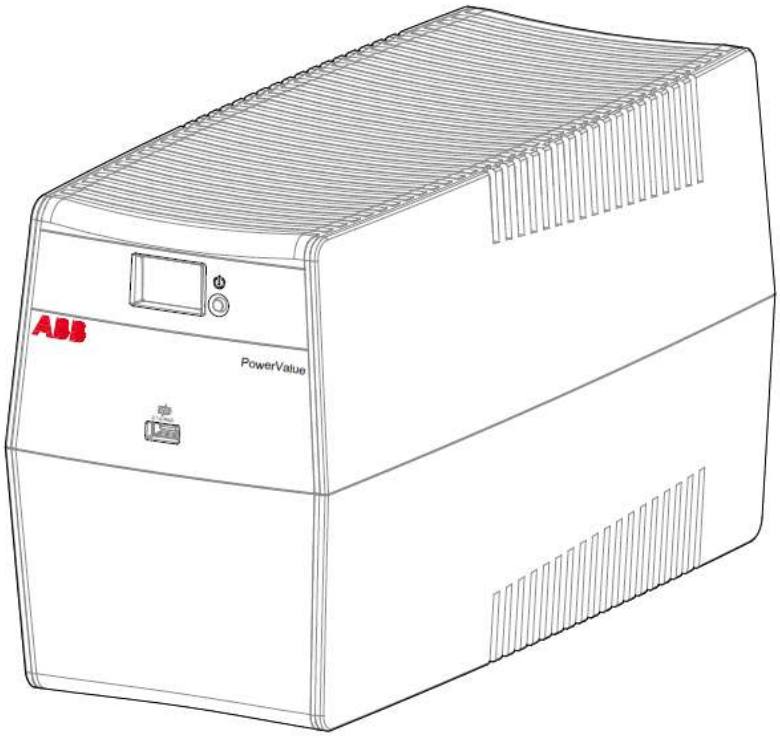
END OF LIFE TREATMENT

PowerValue 11 LI Up

600-2000 VA 220/230/240 V IEC



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APPROVED		DOCUMENT KIND			
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OWNING ORGANIZATION		DOCUMENT ID.	REV.	LANG.	PAGE
ABB, Electrification – Smart Power business line		**4NWD005026**	A	EN	1/10

Contents

1. Important safety instructions

THIS CHAPTER CONTAINS IMPORTANT SAFETY INSTRUCTIONS. READ IT CAREFULLY BEFORE STARTING DISASSEMBLING THE UNIT.

1.1. Symbols and warnings

The following symbols are used in this manual, the list below explains each symbol.

THIS SYMBOL IN CONJUNCTION WITH THE SIGNAL WORD “**DANGER**” INDICATES AN IMMINENT ELECTRICAL HAZARD.

FAILURE TO OBSERVE THE RELATED SAFETY NOTE MAY CAUSE INJURY, DEATH OR EQUIPMENT DAMAGE.

THIS SYMBOL IN CONJUNCTION WITH THE SIGNAL WORD “**WARNING**” INDICATES A POTENTIALLY DANGEROUS SITUATION.

FAILURE TO OBSERVE MAY CAUSE INJURY, DEATH OR EQUIPMENT DAMAGE.

DO NOT DISPOSE OF WITH ORDINARY TRASH.

1.2. Safety rules

DANGER

RISK OF ELECTRIC SHOCK:

BEFORE DISASSEMBLING THE UNIT, MAKE SURE THE UPS IS COMPLETELY SWITCHED OFF AND INTERNAL CAPACITORS HAVE BEEN DISCHARGED BY WAITING AT LEAST 5 MINUTES AFTER SHUTDOWN THE UNIT.

DANGER

THE UNIT MAY CONTAIN BATTERIES. A BATTERY CAN PRESENT A RISK OF ELECTRICAL SHOCK AND HIGH SHORT CIRCUIT CURRENT. THE FOLLOWING PRECAUTIONS SHOULD BE OBSERVED WHEN DISASSEMBLING A UNIT THAT CONTAINS BATTERIES:

A) REMOVE WATCHES, RINGS OR OTHER METAL OBJECTS.
B) USE TOOLS WITH INSULATED HANDLES.
C) WEAR RUBBER GLOVES AND BOOTS.
D) DO NOT LAY TOOLS OR METAL PARTS ON TOP OF BATTERIES.
E) DISCONNECT THE CHARGING SOURCE PRIOR TO CONNECTING OR DISCONNECTING OF BATTERY TERMINALS.
F) ESTABLISH IF THE BATTERY IS INADVERTENTLY GROUNDED. IF INADVERTENTLY GROUNDED, REMOVE SOURCE FROM GROUND. CONTACT WITH ANY PART OF A GROUNDED BATTERY CAN RESULT IN ELECTRICAL SHOCK. THE LIKELIHOOD OF SUCH SHOCK CAN BE REDUCED IF SUCH GROUNDS ARE REMOVED DURING INSTALLATION AND MAINTENANCE (APPLICABLE TO EQUIPMENT AND REMOTE BATTERY SUPPLIES NOT HAVING GROUNDED SUPPLY CIRCUIT. A BATTERY CAN PRESENT A RISK OF ELECTRICAL SHOCK AND HIGH SHORT CIRCUIT CURRENT.

KEEP OUT OF BATTERY POLES WHICH CONTAIN DANGEROUS DC-VOLTAGES CAUSING FATAL ACCIDENTS.

INAPPROPRIATE MANIPULATIONS OF THE BATTERIES CAN CAUSE LIGHTNING SPARKS.

2. Introduction

2.1. Related to the document

The document contains information for end of life recyclers or treatment facilities in accordance with the EU Directive 2012/19/EU about waste electrical and electronic equipment (WEEE). Necessary dismantling information are detailed, together with indication of WEEE materials and components requiring selective treatment are located.

Substances of very high concern under Regulation (EC) No 1907/2006* are typically used but not reported in this document: contact ABB to get the latest declaration available.

** Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).*

2.2. Applicability

This document covers the environmental information of the following products:

Product	Part number
UPS PowerValue 11LI Up 600VA	4NWP100170R0001
UPS PowerValue 11LI Up 800VA	4NWP100171R0001
UPS PowerValue 11LI Up 1000VA	4NWP100172R0001
UPS PowerValue 11LI Up 1500VA	4NWP100173R0001
UPS PowerValue 11LI Up 2000VA	4NWP100174R0001

2.3. Target audience

This document is intended for ABB customers and for professional recyclers. “Professional” refers to the expertise in implementing selective treatment according local National laws. That includes also the understanding of immediate or long term safety risks related to exposure to substances.

2.4. Disclaimer

The information presented in this publication does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequences of its use. Publication thereof does not convey nor imply any license under patent - or other industrial or intellectual - property rights.

3. Recycling advice

The following table is intended to guide selective treatment and recycling, showing where which substances of concern are used and where they are located [ref. Directive 2012/19/EU Article 15 and Annex VII].

Substances of very high concern under Regulation (EC) No 1907/2006(1) are typically used but not reported in this document due to changing nature: contact ABB to get the latest declaration available.

(1) Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Substance(s)/Component(s)	Where used (potential)
Batteries	Used as VRLA block(s).
Printed circuit boards (2)	Used.
Plastic containing brominated flame retardants (BFRs) (2)	- plastic enclosure, - PVC insulation of internal wiring, - input/output receptacles, - bobbin of 50Hz transformer.
Liquid crystal displays (> 100 cm^2)	Not used.
Spare electrolyte capacitors (height > 25 mm, diameter > 25 mm)	Not used.
Polychlorinated biphenyls containing capacitors	Not used.
Mercury containing components	Not used.
Toner cartridges	Not used.
Asbestos components which contain asbestos	Not used.
Cathode ray tubes	Not used.
CFC, HCFC, HFC, HC	Not used.
Gas discharge lamps	Not used.
External electric cables	Not used.
Components containing refractory ceramic fibres	Not used.
Components containing radioactive substances	Not used.

(2) due to assembly complexity and where-used indication, the location of these substances or material will not be indicated along the document, unless considered necessary.

Other materials and components, when not indicated above:

High level component	Substance(s)
Original packaging	- Paper, - Polyethylene foam or film
Fasteners	- Steel, zinc plated
Cables with end terminals	- Copper, - Brass, - PVC, - Nylon, - PBT

The following electrical components require further separation after removal from UPS. They might contain materials or components requiring selective disposal. Contact the manufacturer to get proper instructions:

- 50Hz Transformer;
- fan.

4. Dismantling and recycling instructions

DANGER

RISK OF ELECTRIC SHOCK:

- CAPACITORS AND OTHER UPS COMPONENTS MAY STORE NON-LETHAL ENERGY FOR LONG TIME: HANDLE EVERY CONDUCTIVE PART WITH CARE, AVOIDING SHORT CIRCUIT CAUSING SPARKING OR ARCING.
- BEFORE DISASSEMBLYING COMPONENTS REQUIRING FURTHER RECYCLING, CONTACT THE MANUFACTURER TO GET NECESSARY DISPOSAL INFORMATION;

This section describes the procedure to follow for disassembly. At the end of each subsections, relevant WEEE or recycling information are reported.

Remove the UPS from the carton box and make sure it's powered off.

UPS is delivered with external cables requiring selective disposal.

Figure 4-1: External cables provided

Make sure UPS is powered off the UPS.

WARNING

VRLA BATTERY BLOCKS CONTAINS HAZARDOUS SUBSTANCES AS:

- INORGANIC LEAD, LEAD COMPOUNDS (Pb – CAS 7439-92-1);
- SULFURIC ACID (CAS 7664-93-9 - CAUSES SEVERE BURNS).

THE CONCENTRATION MAY CHANGE, DEPENDING ON THE MANUFACTURER.

CUTTING OR DAMAGING THE PLASTIC CASE, WILL EXPOSE ENVIROMENT TO FURTHER HAZARDOUS SUBSTANCES AS LEAD MONOXIDE (CAS 1317-36-8 -HARMFUL BY INHALATION AND IF SWALLOWED).

Steps for 600VA/800VA

1. Loosen the screws that hold the bottom battery panel (A).
2. Remove the bottom battery panel (A).
3. Swipe out the battery (B).
4. Disconnect the battery wires (**Error! Reference source not found.**).

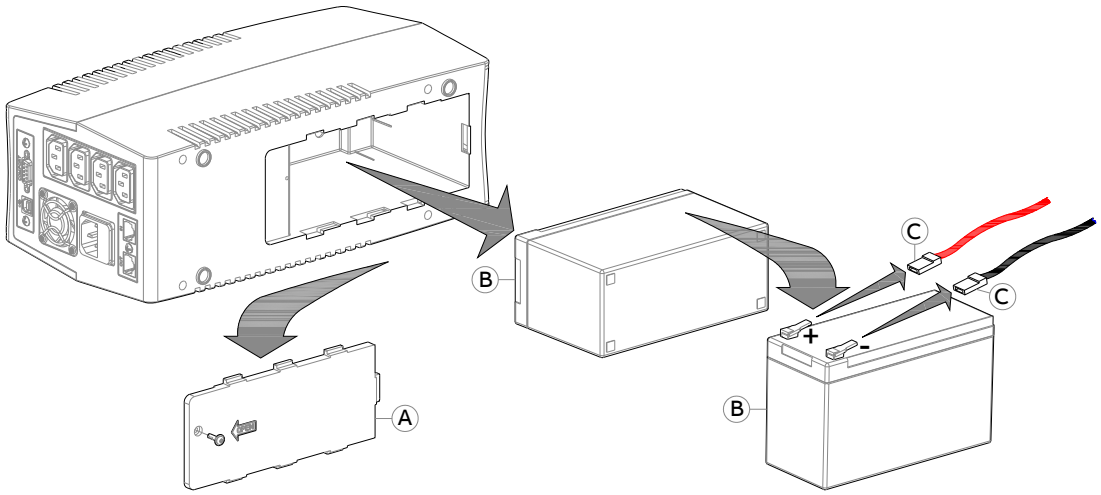

Figure 4-2: Remove the battery (600VA/800VA)

Steps for 1000VA/1500VA/2000VA

1. Loosen the screws that hold the bottom battery panel (A).
2. Remove the bottom battery panel (A).
3. Swipe out the first battery (B2).
4. Remove the two supports (D1 and D2).
5. Swipe out the second battery (B1).
6. Disconnect the batteries wires (C).

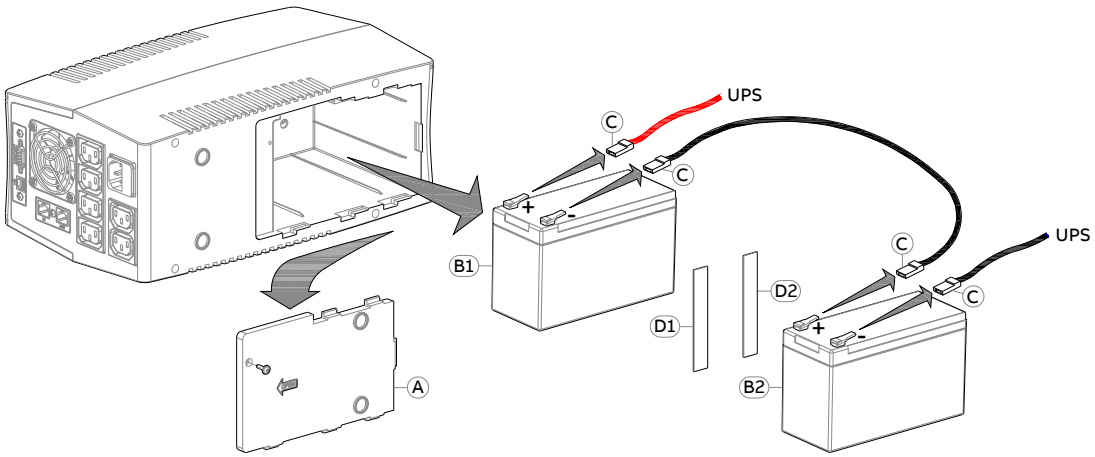

Figure 4-3: Remove the battery (1000VA/1500VA/2000VA)

Remove all the screws on the base, opening the cover (**Error! Reference source not found.**

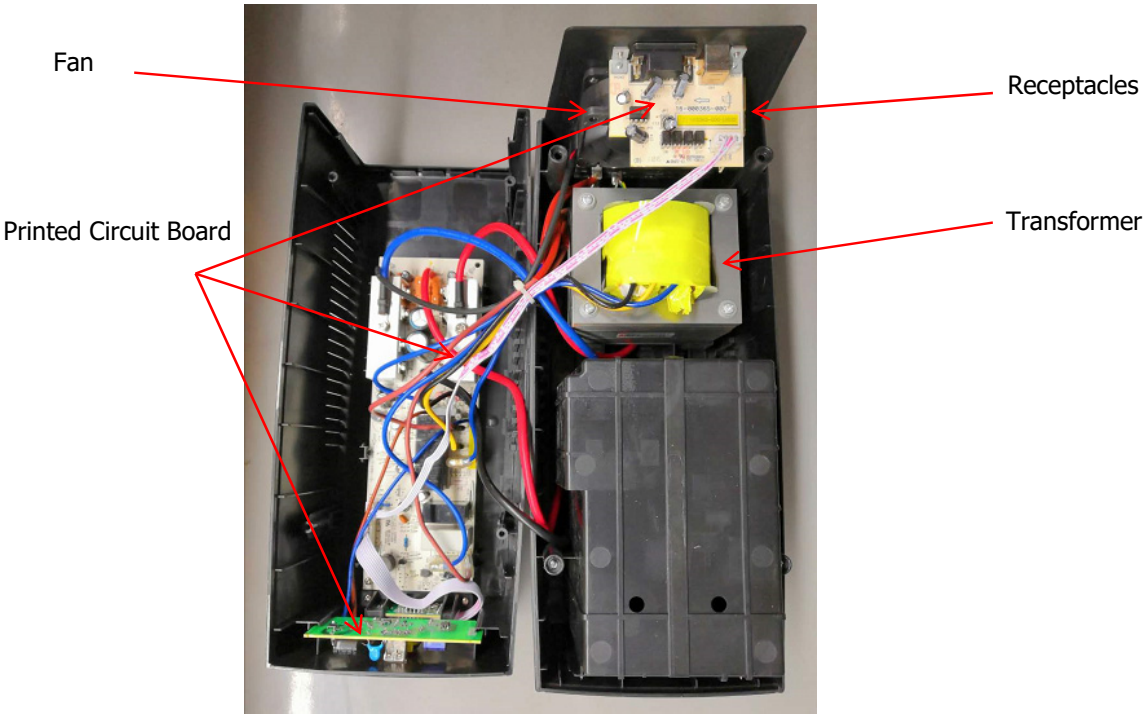

Figure 4-4: UPS content