

INSTRUCTION HANDBOOK 2TFH460001A1001

## **EASYLINE XLP**

## **DECOMMISSIONING INSTRUCTIONS**



## **Table of Contents**

## Easyline XLP

L.	Scope	4
2.1	Safety and protection Precautions Personal protective equipment	<b>4</b> 4
3.	Use of symbols	5
4.	Description of each step structure	5
5.2	Decommissioning step-by-step Phase 1 - Fasteners separation Phase 2 - Base assembly separation Phase 3a - Basic cover assembly separation Phase 3b - EFM cover assembly separation	6 7 17 22
5.	Summary of all parts	26
7.	Energy consumption for XLP 3P decommissioning	27
2	Pecycling information in accordance with the WEFE	27

## 1. Scope

The following document contains step-by-step instructions how to decommission your End-of-life XLP fuse switch disconnector.

Although step-by-step description is prepared specifically for 3Pole XLP products, it is valid partially also for the other pole variants (1P, 2P and 4P), and fully valid for Front cover with EFM accessory (available for XLP00, XLP1, XLP2, XLP3).

In case you have doubts about any of the steps, please reach your local ABB Contact Center for support.

## 2. Safety and protection



#### 2.1 Precautions

Before proceeding with any of the operations described here, the XLP fuse switch disconnector should be removed from the cabinet where it was working, by qualified electrician, following the safety procedures and protocols, valid for the area in use.

Electrically skilled personnel must perform decommissioning of End-of-life product (recommended IEV 195-04-01 person with relevant education and experience to enable him or her to perceive risks and to avoid hazards which electricity can create), following the rules for ergonomics, safety standards and any additional local law requirements, valid at time of performing the described operation.

ABB declines any responsibility for injury to people or damage to property resulting from a failure to comply with the instructions set out in this document and with any applicable safety standard.

#### 2.2 Personal protective equipment (PPE)

While performing decommissioning, the personnel must wear the following PPE:









## 3. Use of symbols

#### Warning

Specific steps of this instruction require more care than the rest of process, due to higher hazard possibility. Such steps are marked in the text with hazard triangle.



#### Part separation information

Shows a list of parts separated, and reason for (if needed) to have specific treatment.



## 4. Description of each step structure

Each phase and step have text, describing the process, tools (in italic), picture and table, containing parts separated.

Pictures provided follow common steps on basic switch: XLP000, XLP00, XLP2 and XLP3. Specifics, related to size and EFM variants are listed as sub-steps or remarks.

At the end of the document is a summary table, containing all parts separated during the process.

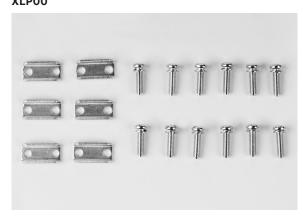
## 5. Decommissioning step-by-step

#### 5.1 Phase 1 - Fasteners separation

Each XLP fuse disconnector can be ordered with different fasteners kit, depending on usage scenario, used to fix the cable to the terminal clamps (lugs, conductor types, etc.). Additionally, as accessories, diverse set of bridge clamps and prism clamps are available.

Most common factory supplied kits are shown at the pictures:

### XLP00



### XLP1/XLP2/XLP3





XLP size	Description	Qty (pcs)	Type	Special separa- tion reason
All / depends on order	Bolts	12	Metal	-
All / depends on order	Washer	12	Metal	-
All / depends on order	Bridge clamps	6	Metal	-

### 5.2 Phase 2 – Base assembly separation

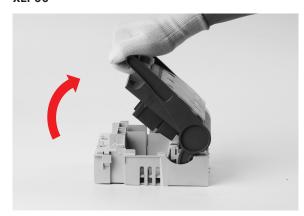
#### 5.2.1 Remove cover from base assembly<sup>1</sup>

Manually operate the cover to open position. Then remove the cover from base assembly.

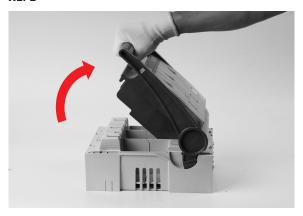
XLP000



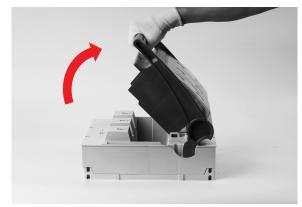
XLP00



5 XLP2



6 XLP3

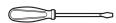


<sup>&</sup>lt;sup>1</sup>Cover with EFM accessory is the same with basic cover.

#### 5.2.2 Remove lower terminal cover<sup>2</sup>

#### 5.2.2.1 Remove lower terminal cover of XLP00 and XLP23

Flat screwdriver



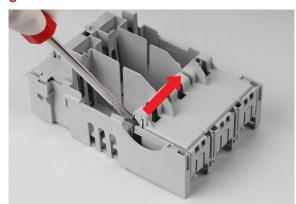
Using flat screwdriver to press the clips inwards. After that lift terminal cover with one hand, while other holds the base fixed.

#### XLP00

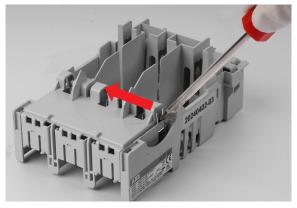
7



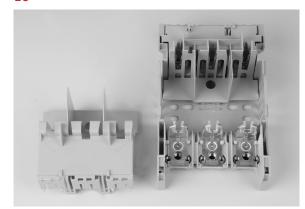
8



9

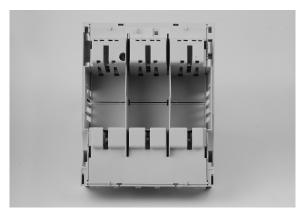


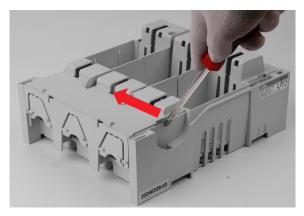
10



#### XLP2

11

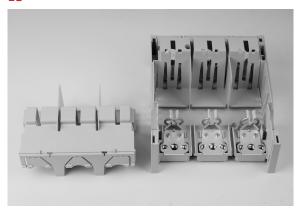




 $<sup>^{2}</sup>$ For XLP000 follow step 5.2.2.

 $<sup>^{3}</sup>$ The disassembly process of XLP1 is the same with XLP2.

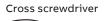
13



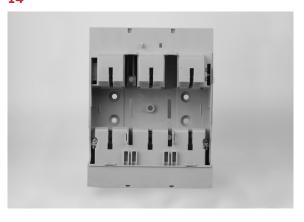
#### Tools

#### 5.2.2.2 Remove lower terminal cover of XLP3.

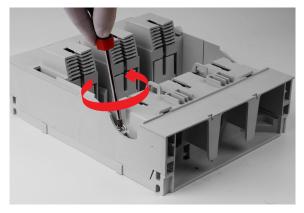
Using cross screwdriver, unscrew the two screws fixing the lower terminal cover to XLP3 base assembly.



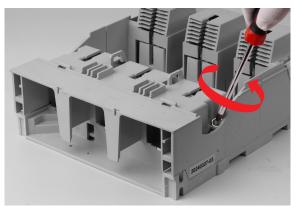
14

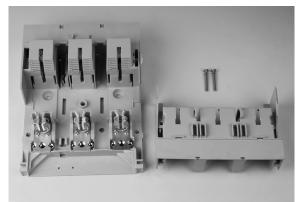


15



16





#### 5.2.3 Remove upper terminal cover.

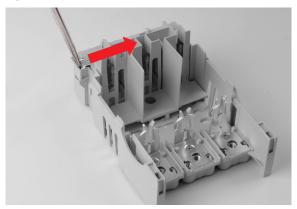
#### 5.2.3.1 Remove upper terminal cover of XLP00 and XLP2

Flat screwdriver

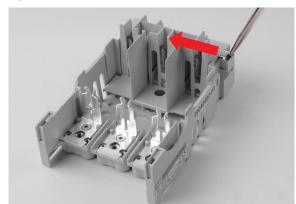


XLP00

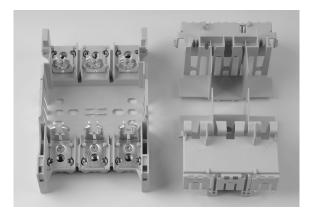
18



19

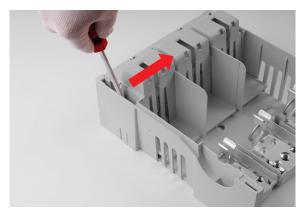


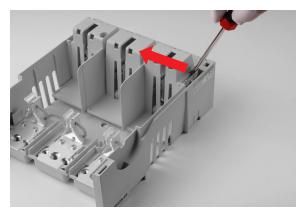
20



XLP2<sup>4</sup>

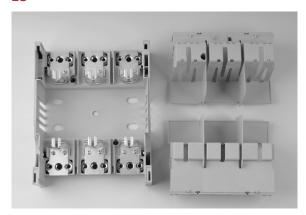
21





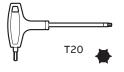
<sup>&</sup>lt;sup>4</sup>The disassembly process of XLP1 is the same with XLP2.

23



#### **Tools**

## Hexalobular screwdriver



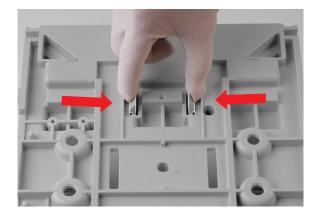
#### 5.2.3.2 Remove upper terminal cover of XLP3.

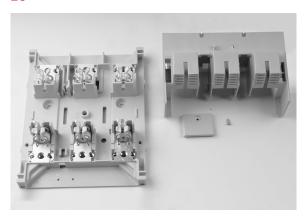
Using hexalobular screwdriver, unscrew the screw, fixing the upper terminal cover from XLP3 base assembly. Pinch the clips of lower terminal cover then remove it.

24



25



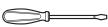


#### 5.2.3.3 Remove terminal cover of XLP000.

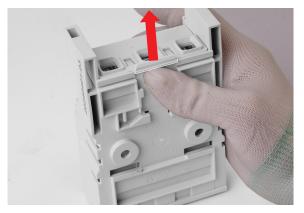
Unclip one side of terminal cover by hand. Lift the cover and free the clips on the other side with the tool.

#### Tools

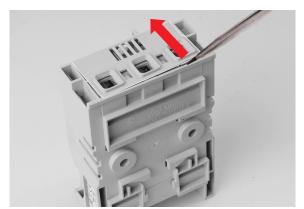
Flat screwdriver



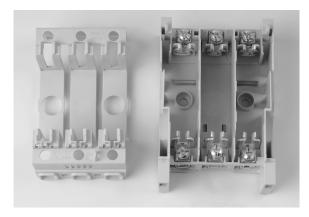




28



29



#### 5.2.4 Remove the lower and upper contacts<sup>5</sup>

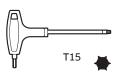
#### 5.2.4.1 Remove lower and upper contacts

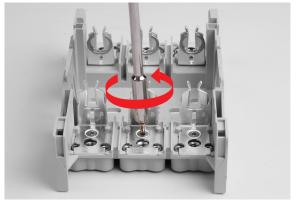
Unscrew contacts using hexalobular screwdriver.

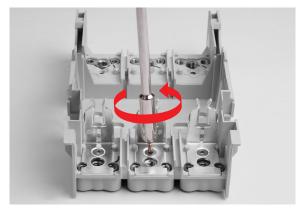
#### **Tools**

30

Hexalobular screwdriver







⁵See step 5.2.4 for XLP000.

 $<sup>^{\</sup>rm 6}\text{The}$  disassembly process of XLP1 is the same with XLP00.

32

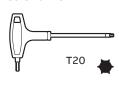


XLP27

#### **Tools**

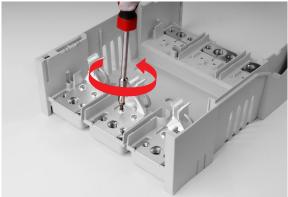
33

Hexalobular screwdriver





34

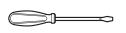


#### 5.2.4.2 Remove the lower and upper contacts on XLP000

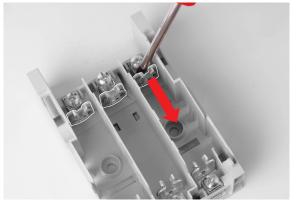
Contacts are not fixed to base; they can be moved smoothly inwards to be removed.

#### Tools

Flat screwdriver









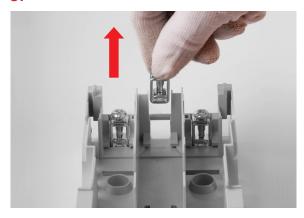
 $<sup>^{7}</sup>$ The disassembly process of XLP3 is the same with XLP2.

#### 5.2.5 Separate nut plates from base

XLP000 – cage clamps are not fixed to base; they can be removed by hand.

All other sizes XLP - Flip the base to remove the plates (they are not fixed to the base).

#### **37**

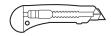


#### **Tools**

#### 5.2.6 Remove technical label

Use a cutter to pick a corner of the label and remove by hand.

#### Cutter

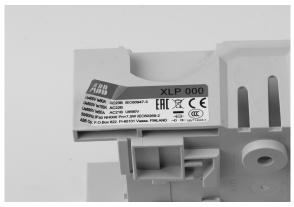


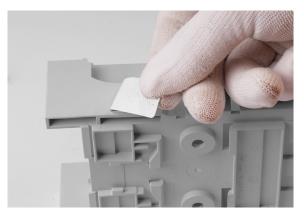
XLP0008

38



39



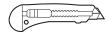


 $<sup>^{8}\</sup>mbox{The disassembly process of XLP00, XLP1, XLP2}$  and XLP3 is the same with XLP000.

#### 5.2.7 Remove the traceability label

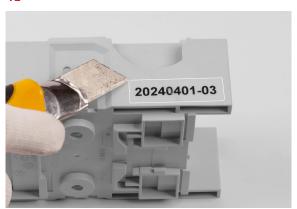
Use a cutter to pick a corner of the label and remove by hand.

Cutter



XLP000°

41



42

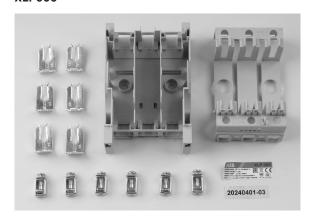


43

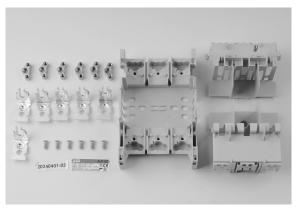


#### 5.2.8 Summary of all 5.2 Phase 2 parts

**44** XLP000

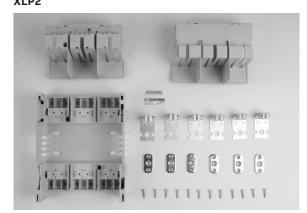


**45** XLP00

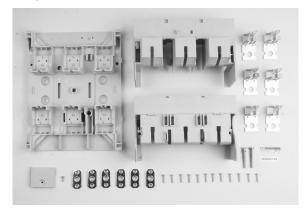


<sup>&</sup>lt;sup>9</sup>The disassembly process of XLP00, XLP1, XLP2 and XLP3 is the same with XLP000.

**46** XLP2



**47** XLP3



#### Summary table as below:



XLP size	Description	Qty (pcs)	Type	Special separa- tion needed	
000, 00	Screws	6	Metal	-	
2	Screws	12	Metal	-	
3	Screws	15	Metal	-	
00, 1, 2, 3	Nut plates	6	Metal	-	
000	Cage clamps	6	Metal	-	
All	Contacts w/ spring	6	Metal	-	
All	Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	
00, 1, 2, 3	Terminal cover	2	Plastic	Yes (thermoplastic containing brominated flame retardants)	
000	Terminal cover	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	
3	Base protection cover	1	Plastic	Yes (thermoplastic containing brominat- ed flame retardants)	
All	Technical label	1	Plastic	-	
All	Traceability label	1	Paper	-	

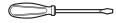
#### 5.3 Phase 3a – Basic Cover assembly separation

#### Tools

#### 5.3.1 Dismount the transparent cover

Flip the cover and locate the clips. Using tool pry the clips and push transparent cover to fall.

Flat screwdriver



**XLP000** – To pry the two bottom or top clips (on figure lower are displayed)

48







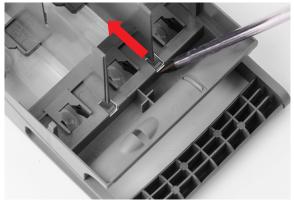
50



**XLP00** – To pry the two bottom or top clips (on figure lower are displayed)

51





#### **53**



## $\triangle$

#### XLP210

Since the cover is bigger, there are three clips you should use two flat screwdrivers at the same time, pry tools or similar, to remove clips. This operation should be performed with greater attention since piercing or cutting may occur.

#### **54**



#### 55



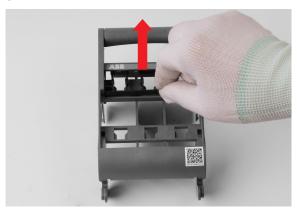


 $<sup>^{\</sup>mbox{\tiny 10}}\mbox{The}$  disassembly process of XLP3 is the same with XLP2.

#### 5.3.2 Remove the fuse holder

XLP000 - Manually remove the fuse holder.

**57** 

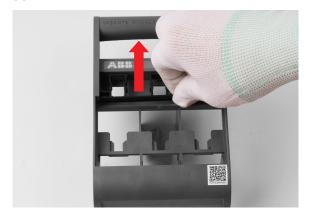


58



**XLP00** – Manually remove the fuse holder.

59



60





#### XLP211

Using the flat screwdriver keep open the two tabs simultaneously.

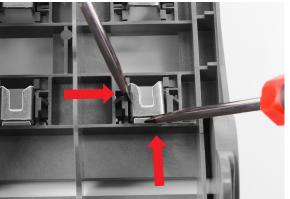
In the same time push metal fuse holder towards the plastic tabs. When fuse holder is above the tabs remove flat screwdriver. Push metal fuse holder until end position. Lift the metal fuse holder pushing with screwdriver from the back side. Take caution making this step, since there is pinching hazard.

**Tools** 

Flat screwdriver

61





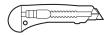


<sup>&</sup>lt;sup>11</sup>The disassembly process of XLP3 is the same with XLP2.

#### 5.3.3 Remove the front Type label

Use a cutter to pick a corner of the label and remove by hand.

#### Cutter



XLP00012

63



64

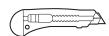


#### Tools

#### 5.3.4 Remove the front QR label

Use a cutter to pick a corner of the label and remove it by hand.

#### Cutter



XLP00013

65





<sup>&</sup>lt;sup>12</sup>The disassembly process of XLP00, XLP1, XLP2 and XLP3 is the same with XLP000.

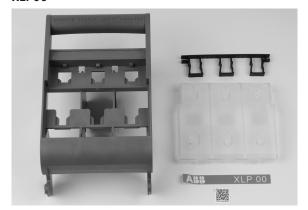
 $<sup>^{13}</sup>$ The disassembly process of XLP00, XLP1, XLP2 and XLP3 is the same with XLP000.

#### 5.3.5 Summary of all 5.3 Phase 3a parts

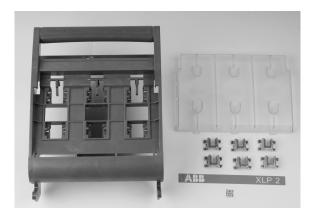
**67** XLP000



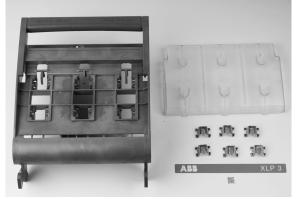
68 XLP00



69 XLP2



**70** XLP3



#### Summary table as below:



XLP size	Description	Qty (pcs)	Type	Special separa- tion needed
All	Transparent cover	1	Plastic	-
All	Cover frame	1	Plastic	Yes (thermoplastic containing brominat- ed flame retardants)
All	Front type label	1	Plastic	-
All	Front QR label	1	Plastic	-
000,00	Fuse holder	1	Plastic	Yes (thermoplastic containing brominat- ed flame retardants)
1, 2, 3	Fuse holder	6	Metal	-

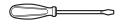
#### 5.4 EFM cover assembly separation<sup>14</sup>

#### **Tools**

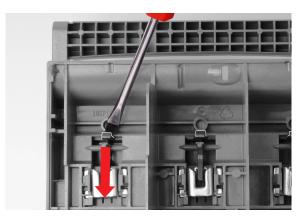
#### 5.4.1 Dismount the transparent cover<sup>15</sup>

Dismount the EFM front cover – flip the cover and pry the EFM front cover using clips.

Flat screwdriver



7:



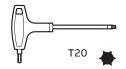
#### **Tools**

#### 5.4.2 Remove PCB assembly

#### 5.4.2.1 Unscrew second PCB assembly<sup>16</sup>

Hexalobular screwdriver

ar Using hexalobular screwdriver, unscrew four screws, which fix PCB on EFM front cover's back side.



**72** 





<sup>&</sup>lt;sup>14</sup>EFM is not available option for XLP 000. When "all" is listed in this Phase, it should be considered as all sizes, where EFM is available.

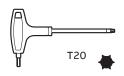
 $<sup>^{15}</sup>$ The disassembling process refer to 5.3.1.

<sup>&</sup>lt;sup>16</sup>Second PCB is only used on XLP1, XLP2, XLP3.

#### 5.4.2.2 Unscrew main PCB assembly

Using hexalobular screwdriver, unscrew the two screws, which fix it to the back side of the EFM front cover.

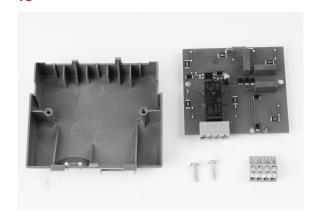
Hexalobular screwdriver



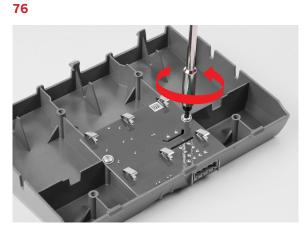
XLP00 74



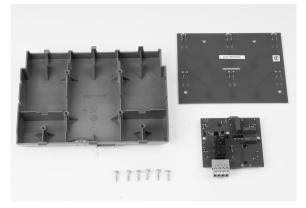
**75** 



XLP2

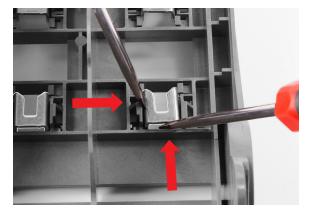


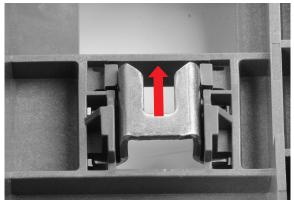
**77** 



#### 5.4.3 Remove the fuse holder<sup>17</sup>

78



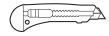


 $<sup>^{\</sup>mbox{\tiny 17}}\mbox{The disassembling process follows the same tools and method, described in 5.3.2}$ 

#### 5.4.4 Remove the front Type label<sup>18</sup>

Use a cutter to pick a corner of the label and remove by hand.

Cutter



80



81



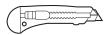
#### 5.4.5 Remove the front QR label<sup>19</sup>

#### Tools

#### 5.4.6 Remove the back traceability label

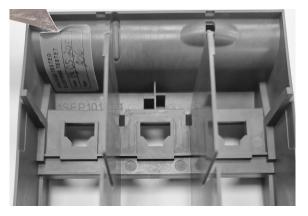
Use a cutter to pick a corner of the label and remove by hand.

Cutter

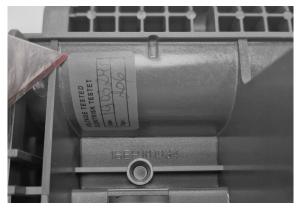


XLP00

82



XLP220



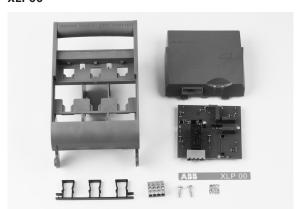
<sup>&</sup>lt;sup>18</sup>The disassembling process refer to 5.3.3

 $<sup>^{\</sup>scriptsize{19}}$  The disassembling process refer to 5.3.4

<sup>&</sup>lt;sup>20</sup>The disassembling process of XLP1 and XLP3 refer to XLP2.

#### 5.4.7 Summary of all 5.4 Phase 3b parts

**43** XLP00



44 XLP2<sup>21</sup>



#### Summary table as below:



XLP size	Description	Qty (pcs)	Type	Special separa- tion needed
All	EFM front cover	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
All	Cover frame	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
All	Front type label	1	Plastic	-
All	Front QR label	1	Plastic	-
000,00	Fuse holder	1	Plastic	Yes (thermoplastic containing brominat- ed flame retardants)
1, 2,3	Fuse holder	6	Metal	-
All	Back traceability label	1	Paper	-
All	EFM PCB	1	Plastic, Metal, Electronics	Printed circuit board
1,2,3	EFM PCB2	1	Plastic, Metal, Electronics	Printed circuit board
00	Screws	2	Metal	-
1, 2, 3	Screws	6	Metal	-

<sup>&</sup>lt;sup>21</sup>Summary of all parts of XLP1 and XLP3 is the similar with XLP2.

# 6. Summary of all parts, available for recycling or disposaltep



XLP size	Description	Qty (pcs)	Туре	Special separation needed	Phase
All / If ordered	Bolts	6	Metal	-	5.1
All All / If ordered	Nuts	6	Metal	-	5.1
All All / If ordered	Bridge clamps	6	Metal	-	5.1
000,00	Screws	6	Metal	-	5.2
1, 2, 3	Screws	12	Metal	-	5.2
00, 1, 2, 3	Nut plates	6	Metal	-	5.2
000	Cage clamps	6	Metal	-	5.2
All	Contacts w/ spring	6	Metal	-	5.2
All	Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	5.2
00, 1, 2, 3	Terminal cover	2	Plastic	Yes (thermoplastic containing brominated flame retardants)	5.2
000	Terminal cover	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	5.2
All	Technical label	1	Plastic	-	5.2
All	Traceability label	1	Paper	-	5.2
All	Transparent cover	1	Plastic	-	5.3
All	Cover frame	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	5.3, 5.4
All	Front type label	1	Plastic	-	5.3, 5.4
All	Front QR label	1	Plastic	-	5.3, 5.4
000,00	Fuse holder	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	5.3, 5.4
1, 2, 3	Fuse holder	6	Metal	-	5.3, 5.4
All / If EFM type	EFM front cover	1	Plastic	Yes (thermoplastic containing brominated flame retardants)	5.4
All / If EFM type	Back traceability label	1	Paper	-	5.4
All / If EFM type	EFM PCB	1	Plastic, Metal, Electron- ics	Printed circuit board	5.4
1, 2, 3 / If EFM type	EFM PCB2	1	Plastic, Metal, Electron- ics	Printed circuit board	5.4
All / If EFM type	Screws	2	Metal	-	5.4
1, 2, 3 / If EFM type	Screws	6	Metal	-	5.4

# 7. Energy consumption for XLP 3P decommissioning

All listed step-by-step operations are performed manually. Carbon emissions can be considered negligible.

## 8. Recycling information in accordance with the WEEE

Recycling in accordance with EN 50419:2022 (separate collection of waste of electrical and electronic equipment)

Our products are marked in accordance with Directive 2012/19/EU (crossed-out wheeled bin):

You should not place the whole End-of-life product in a normal waste. The products should be decommissioned, following steps in this instruction, and all parts should be divided for a separate disposal, as suggested in summary table above, and taking in consideration all the local laws applicable.





### **Contact us**

ABB Oy Protection and Connection P.O. Box 622 FI-65101 Vaasa Finland

abb.com/lowvoltage