

INSTRUCTION HANDBOOK
2TFH400009A1001

InLineII

DECOMMISSIONING INSTRUCTIONS



Table of Contents

InLinell

1. Scope	5
2. Safety and protection	5
2.1 Precautions	5
2.2 Personal protective equipment (PPE)	5
3. Use of symbols	6
4. Description of each step	6
5. Decommissioning step-by-step	7
5.1 Phase 1 – separate into mainly parts	7
5.1.1 Remove accessories	7
5.1.1.1 Remove the cable shroud short (only if the product has this part)	7
5.1.1.2 Label holder (not all products have this part)	7
5.1.1.3 EFM kit (not all products have this part)	7
5.1.1.4 ITS 2.1 (not all products have this part)	8
5.1.2 Label holder (not all products have this part)	8
5.1.2.1 Single switch (3-pole)	8
5.1.2.2 Double switch (3-pole)	9
5.1.3 EFM kit (not all products have this part)	9
5.1.3.1 Rotary buckle connection	9
5.1.3.2 Bolted connection	10
5.2 Phase 2 – Front cover assembly separation	10
5.2.1 Dismount the double handle connection (only for double switch)	10
5.2.2 Dismount the three front covers from connection rails	11
5.2.3 Dismount the fuseholders	11
5.2.4 Dismount the handle from the front cover L2	11
5.2.5 Dismount the Inspection window	12
5.2.6 Solid link NH3 1000A (only for BZL/BZH)	12
5.2.7 Summary of the phase 5.2 – front cover assembly separation	13
5.3 Phase 3 – Middle part separation	14
5.3.1 Remove the terminal cover label	14
5.3.2 Remove the ABB logo label	14
5.3.3 Separate the left and right side	15
5.3.3.1 Type 1	15
5.3.3.2 Type 2	16
5.3.3.3 Type 3	16
5.3.4 Summary of the phase 5.3 – middle part separation	17
5.3.4.1 Summary of type 1	17
5.3.4.2 Summary of type 2	17
5.3.4.3 Summary of type 3	18

5.4 Phase 4 – Base assembly separation	19
5.4.1 ZHBM/ZLBM 1/2/3	19
5.4.1.1 Remove the plastic covers	19
5.4.1.2 Remove the busbar terminal L1, L2, L3	19
5.4.1.2.1 Flat busbar	19
5.4.1.2.2 Z-Busbar	20
5.4.1.2.3 Busbar for large current	21
5.4.1.3 Remove the cable terminals L1, L2, L3	22
5.4.1.3.1 Bolt connection	22
5.4.1.3.2 Integrated V-clamp	24
5.4.1.3.3 Connection on rear side (MB)	25
5.4.1.3.4 Side connection (SC)	25
5.4.1.4 Summary of the phase 5.4 – base assembly separation	26
5.4.1.4.1 Bolt connection	26
5.4.1.4.2 Integrated V-clamp	27
5.4.1.4.3 Connection on rear side (MB)	27
5.4.1.4.4 Side connection (SC)	28
5.4.2 ZHBM/ZLBM 00	29
5.4.2.1 Remove the plastic covers	29
5.4.2.2 Remove the busbar terminal L1, L2, L3	29
5.4.2.2.1 Flat busbar	29
5.4.2.2.2 Z-busbar	30
5.4.2.2.3 HC-busbar	31
5.4.2.3 Remove the cable terminals L1, L2, L3	32
5.4.2.3.1 Bolt connection	32
5.4.2.3.2 Single/double AL clamp	33
5.4.2.4 Remove the IP cover	34
5.4.3 BZL/BZH	35
5.4.3.1 Remove the plastic covers	35
5.4.3.2 Remove the busbar terminal L1, L2, L3	35
5.4.3.3 Remove the cable terminals L1, L2, L3	35
5.4.3.4 Decommission of busbar terminals and cable terminals	37
5.4.3.5 Terminal Kit (only for some special Products)	38
5.4.3.6 Summary of the phase 5.2.3 – base assembly of BZL/BZH separation	39
5.5 Phase 5 – Separation of accessories	40
5.5.1 EFM kit	40
5.5.1.1 Remove EFM from the EFM base	40
5.5.1.2 Open the EFM housing	41
5.5.1.3 Remove the EFM label	41
5.5.1.4 Remove the EFM data label	41
5.5.1.5 Summary of the phase 5.5.1 – EFM kit	42
5.5.2 ITS 2.1	42
5.5.2.1 Open and take off the adapter cover	42
5.5.2.2 Take off the new assembly unit	43
5.5.2.3 Separate the adapter plate	43
5.5.2.4 Separate the ITS 2.1 new assembly unit	44
5.5.2.5 Remove the label ITS2 label for display	45
5.5.2.5 Summary of the phase 5.5.2 – ITS 2.1 module	45
6. Energy consumption for InLineII decommissioning	47
7. Recycling information in accordance with the WEEE	47

1. Scope

The following document provides step-by-step instructions on how to decommission your End-of-life In-LineII Products, including ZLBM, ZHBM, BZL, BZH.

If you have any doubts about the steps, please contact your local ABB Contact Center for support.

2. Safety and protection



2.1 Precautions

Before proceeding with any of the operations described here, InLineII should be removed from the cabinet, by qualified electrician, following the safety procedures and protocols, valid for the area in use.

Electrically skilled personnel must perform the decommissioning of End-of-life products (recommended as per IEC 60947-1: A person with relevant education and experience to enable them to perceive risks and avoid Hazards created by electricity), 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, personnel must wear the following PPE:



3. Use of symbols

Warning

Specific steps of this instruction require extra caution, due to higher risk of hazard. These steps are marked with a hazard triangle in the text.



Part separation information

Shows all of the components and notations of specific materials in each phase.



4. Description of each step

Each phase and step include text, describing the process, tools, picture and a table containing separated parts.

5. Decommissioning step-by-step

5.1 Phase 1 – Separate into main parts

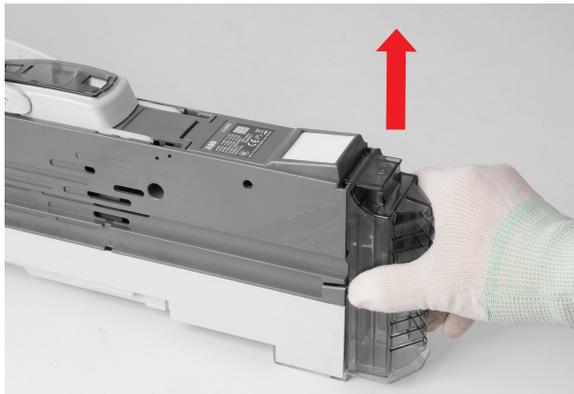
5.1.1 Remove accessories

The accessories include cable shroud, label holder, EFM and ITS 2.1. Any separately purchased accessories must be removed.

5.1.1.1 Remove the Cable Shroud Short (only if the product has this part)

Take the cable shroud out along the slide by hand.

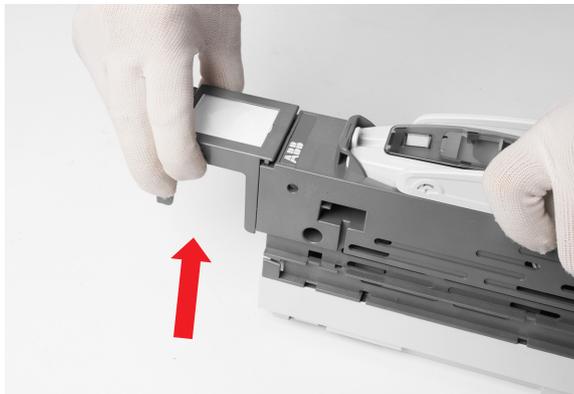
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5.1.1.2 Label holder (not all products have this part)

Take the label holder out along the slide by hand.

2



Tools

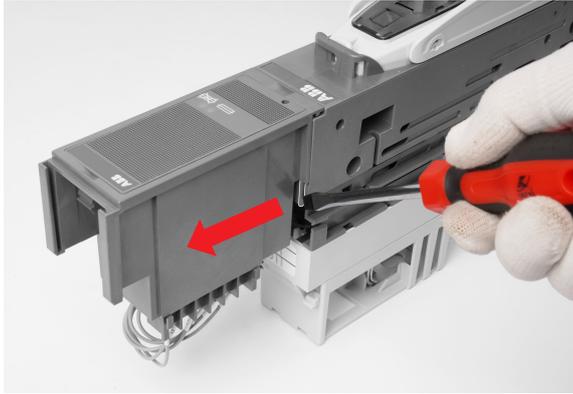
Flat-head
screwdriver



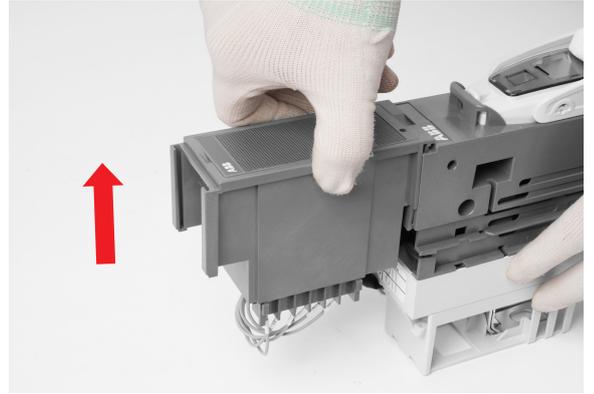
5.1.1.3 EFM kit (not all products have this part)

Using a flat-head screwdriver in order to upwrap the two clips on both sides, and then remove the EFM part along the slideway.

3



4



5.1.1.4 ITS 2.1 (not all products have this part)

Using a flat head screwdriver in order to upwarp the two clips on both sides, and then remove the ITS2.1 part along the slideway.

5



6



5.1.2 Remove cover from the base assembly

In the InLine II product line, there are four different types of front covers: 3-pole single switch, 3-pole double switch, 1-pole single switch, and 1-pole double switch. Due to the similarity in decommissioning steps between the 1-pole and 3-pole switches, we will use the 3-pole switch as an example.

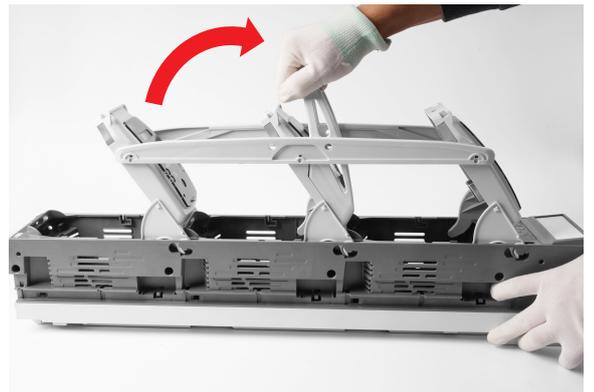
5.1.2.1 Single switch (3-pole)

Lift the front cover at the position shown in the following picture. After that, secure the base assembly and then pull the front cover firmly.

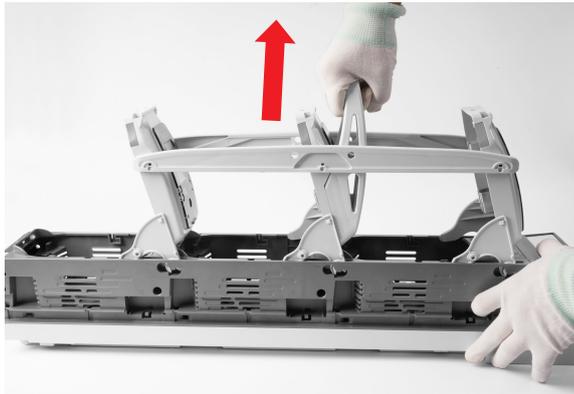
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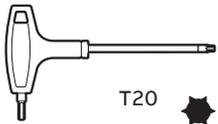


9



Tools

Hexagonal
screwdriver



5.1.2.2 Double switch (3-pole)

Lift the front cover at the position shown in the following picture. Then, use a hexagonal screwdriver to remove the two screws on the double handle connection. After that, take off the double handle connection. The subsequent separation steps are the same as for the single switch.

10



11



5.1.3 Remove the middle part from the base assembly

There are two different types, each with a middle part that attaches to the base assembly.

Tools

Flat-head
screwdriver



5.1.3.1 Rotary buckle connection

Use a flat-head screwdriver to turn the three clips at the bottom of the middle part. The middle part can then be easily removed from the base assembly.

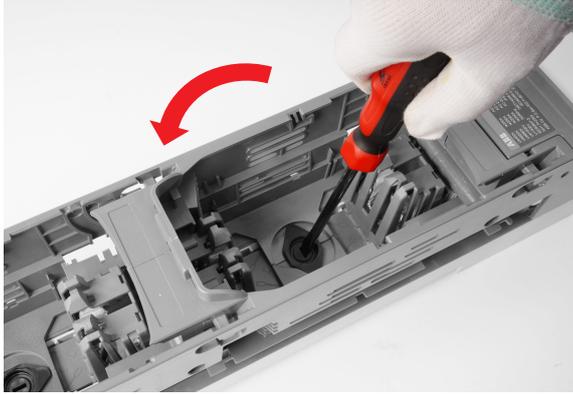
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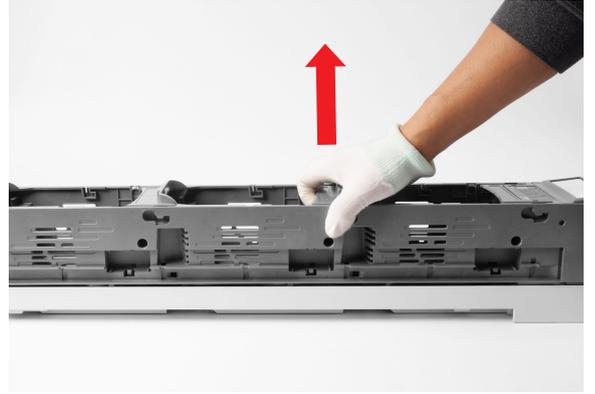
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14



15



5.1.3.2 Bolted connection

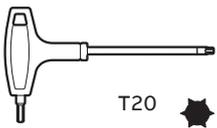
Remove the six screws connecting the middle section to the base using a hex screwdriver. Then, the middle part can be removed by hand.

16



Tools

Hexagonal
screwdriver



5.2 Phase 2 – Front cover assembly separation

5.2.1 Dismount the double handle connection (only for double switch)

Remove the self-tapping countersunk screw using a hexagonal screwdriver, then take off the double handle connection.

17



18



5.2.2 Dismount the three front covers from connection rails

Rotate the three covers to the position shown below, then remove the two connection rails.

19

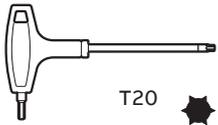


20



Tools

Hexagonal
screwdriver



5.2.3 Dismount the fuseholders

Remove the self-tapping countersunk screw using a hexagonal screwdriver, then take off the two fuse holders and one plastic fuse release.

21



22



5.2.4 Dismount the handle from the front cover L2

Push the handles out along the slide.

23

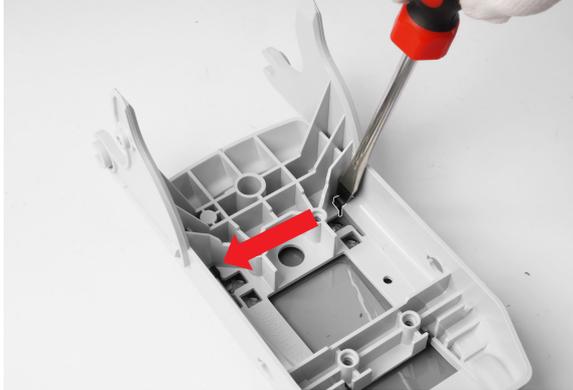
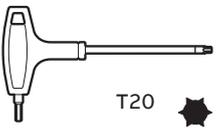


24



ToolsFlat-head
screwdriver**5.2.5 Dismount the Inspection window**

Use a flat-head screwdriver to unclench the clip of the window and push the window until the back clips can be pried.

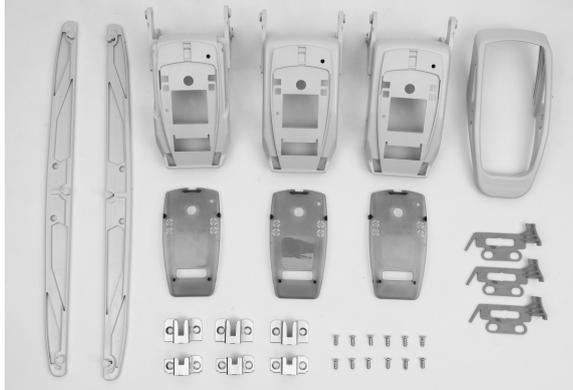
25**26****27****Tools**Hexagonal
screwdriver**5.2.6 Solid link NH3 1000A (only for BZL/BZH)**

Use a hexagonal screwdriver to remove the two screws, then take off the gripping lug.

28**29**

5.2.7 Summary of the Phase 5.2 – Front cover assembly separation

30



Summary table as below:

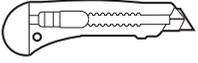


Description	Qty (pcs)	Type	Special separation needed
L1/L3 front cover	2	Plastic	Yes (thermoplastic containing brominated flame retardants)
Front cover L2	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Connection rail	2	Plastic	-
Inspection window	3	Plastic	-
Handle	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Fuse holder	6	Metal	-
Fuse release	3	Plastic	Yes (thermoplastic containing brominated flame retardants)
Screw	12	Metal	For BZL/BZH, plus 2; for double switch, plus 2
Double handle connection up	1	Plastic	Only for double switch
Double handle connection down	1	Plastic	Only for double switch
Gripping lug	1	Metal	Only for BZL/BZH
Knife	1	Metal	Only for BZL/BZH

5.3 Phase 3 – Middle part separation

Tools

Cutter



5.3.1 Remove the terminal cover label

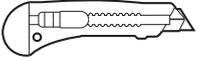
Use a cutter to lift a corner of the label and then remove it by hand.

31



Tools

Cutter



5.3.2 Remove the ABB logo label

Use a cutter to lift a corner of the label, then remove it by hand.

32

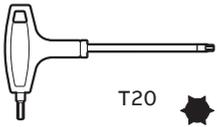


5.3.3 Separate the left and right side

There are three types of middle parts. If there is an arc extinguishing shield without a rotary buckle connection, proceed to 5.3.3.1. If there is an arc extinguishing shield with a rotary buckle connection, proceed to 5.3.3.2. Otherwise, proceed to 5.3.3.3.

Tools

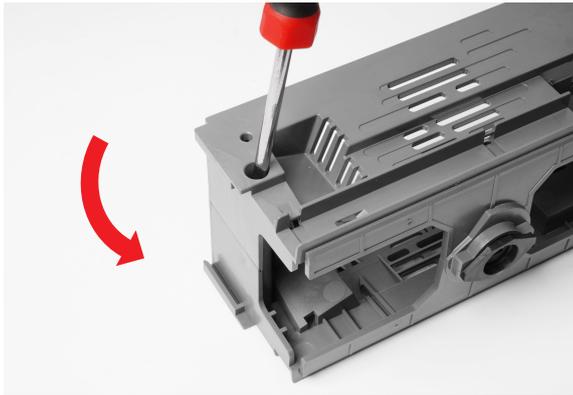
Hexagonal screwdriver



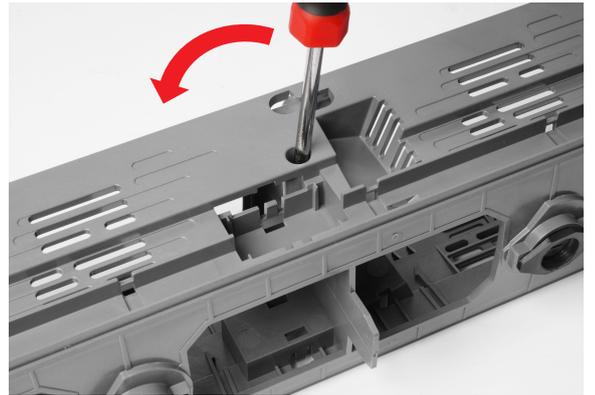
5.3.3.1 Type 1

Use a hexagonal screwdriver to remove the four screws, then separate the two sides and swivel clasps by hand.

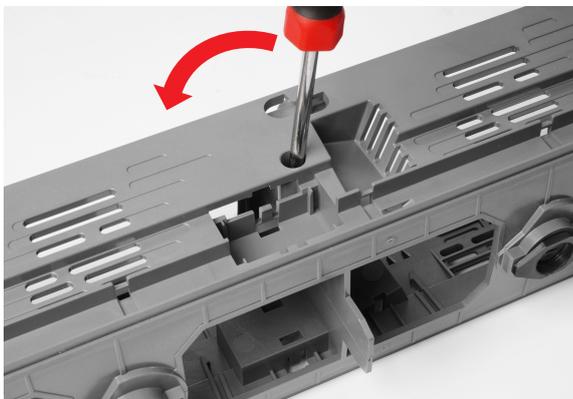
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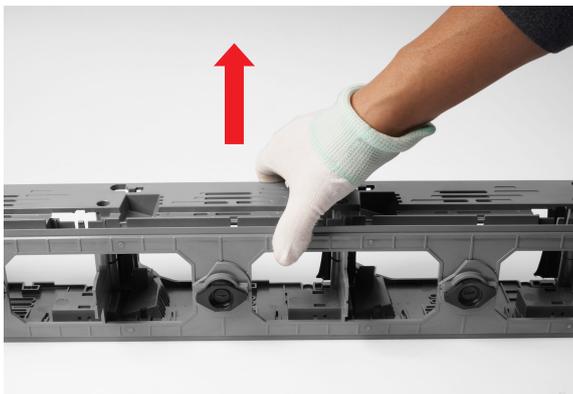
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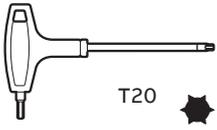


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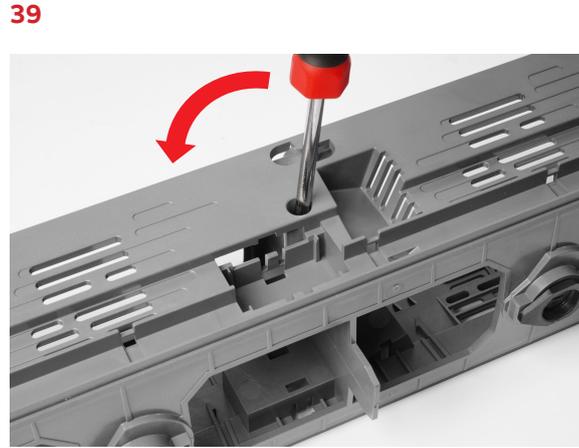


Tools

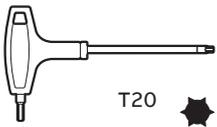
Hexagonal
screwdriver

**5.3.3.2 Type 2**

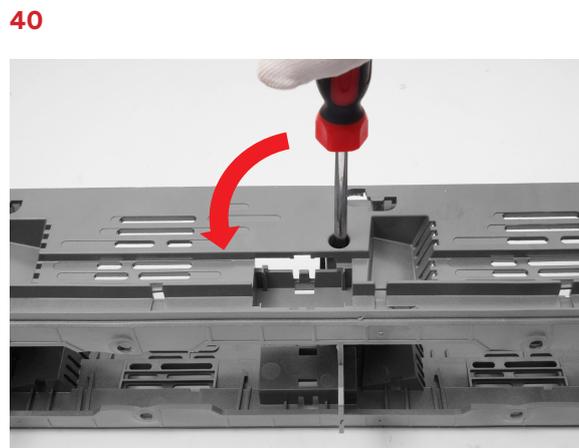
Use a hexagonal screwdriver to remove the four screws, then separate the two sides, arc extinguishing shields, and swivel clasps by hand.

**Tools**

Hexagonal
screwdriver

**5.3.3.3 Type 3**

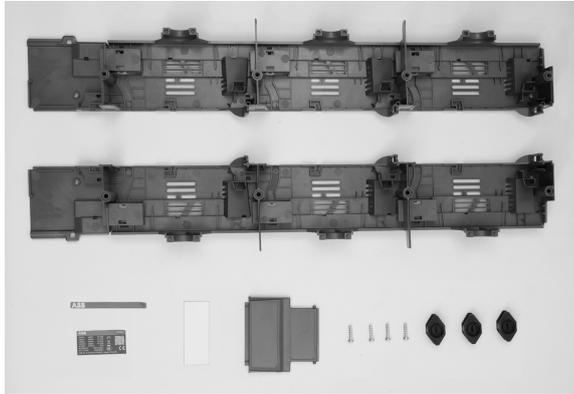
Remove the four screws on the side of the middle section using a hexagonal screwdriver. Finally, separate the two parts by hand.



5.3.4 Summary of the Phase 5.3 – Middle part separation

5.3.4.1 Summary of type 1

41



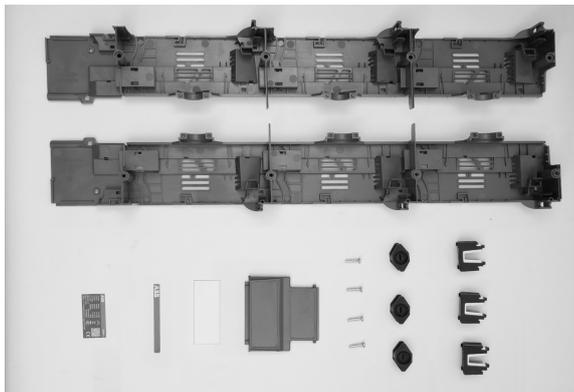
Summary table as below:



Description	Qty (pcs)	Type	Special separation needed
Right side plate	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Lift side plate	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
1/4 Swivel clasp	3	Plastic	-
Terminal cover	1	Plastic	-
Screws	4	Metal	-
ABB Logo label	1	Plastic	-
Terminal cover label	1	Plastic	-

5.3.4.2 Summary of type 2

42



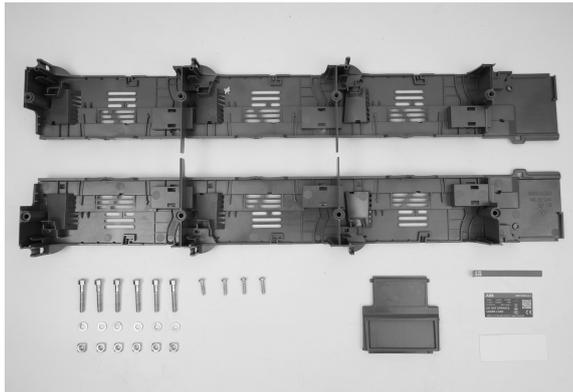
Summary table as below:



Description	Qty (pcs)	Type	Special separation needed
Right side plate	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Lift side plate	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
1/4 Swivel clasp	3	Plastic	-
Arc extinguishing shield	3	Metal	-
Terminal cover	1	Plastic	-
Screws	4	Metal	-
ABB Logo label	1	Plastic	-
Terminal cover Label	1	Plastic	-

5.3.4.3 Summary of type 3

43



Summary table as below:



Description	Qty (pcs)	Type	Special separation needed
Right side plate	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Lift side plate	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Spring lock washer	6	Metal	-
Square nut	6	Metal	-
Countersunk head screw	6	Metal	-
Terminal cover	1	Plastic	-
Screws	4	Metal	-
ABB logo label	1	Plastic	-
Terminal cover label	1	Plastic	-

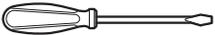
5.4 Phase 4 – Base assembly separation

5.4.1 ZHBM/ZLBM 1/2/3

As for the base assembly, there are three different types: ZHBM/ZLBM 00, ZHBM/ZLBM 1/2/3, and BZH/BZL. The following sections describe these three types separately. For ZHBM/ZLBM 1/2/3, proceed to 5.4.1; for ZHBM/ZLBM 00, proceed to 5.4.2; for BZH/BZL, proceed to 5.4.3.5.4.1 ZHBM/ZLBM 1/2/3.

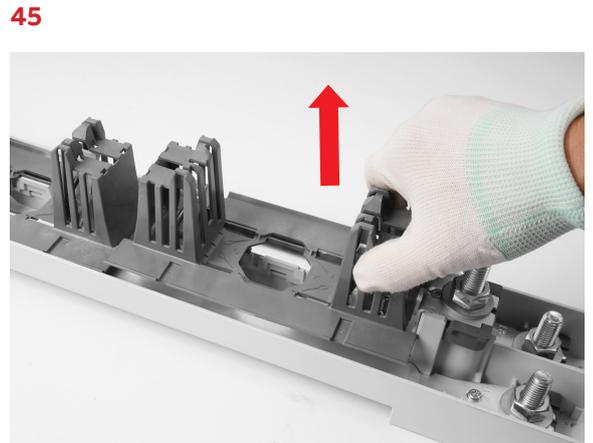
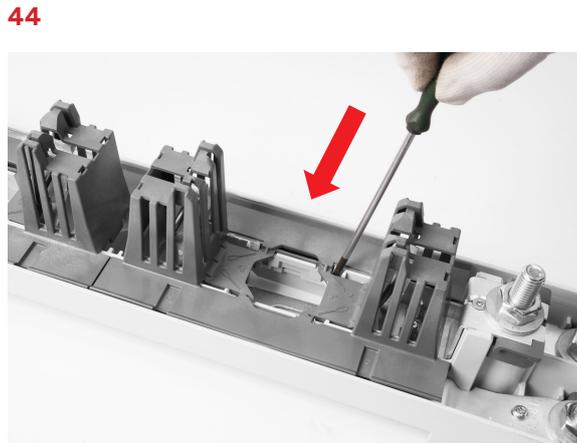
Tools

Flat-head screwdriver



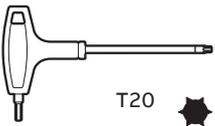
5.4.1.1 Remove the plastic covers

Use a flat-head screwdriver to lift the plastic covers, then remove them by hand.



Tools

Hexagonal screwdriver



5.4.1.2 Remove the busbar terminal L1, L2, L3

There are two types of busbar systems: flat busbar (5.4.1.2.1) and Z-busbar (5.4.1.2.2).

5.4.1.2.1 Flat busbar

Remove the fixing screws using a hexagonal screwdriver, then take off the three-entry plate.

If each busbar terminal has a current transformer, use a flat-head screwdriver to remove the current transformer cover.

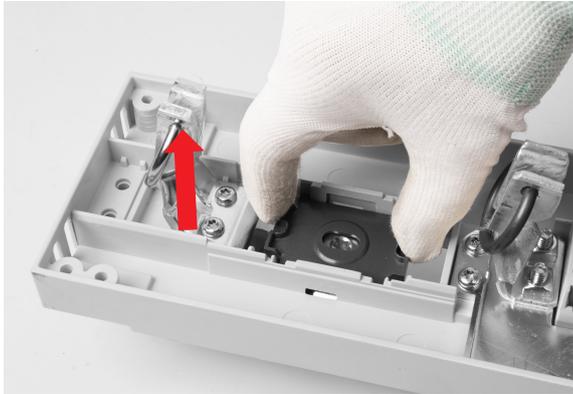


Flat-head screwdriver

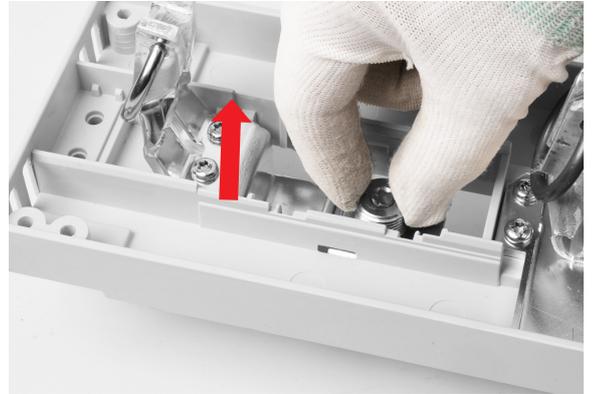


If there is a hook on the busbar, follow these two steps: remove the hook clamp IP cover, then use a hexagonal screwdriver to remove the hook.

48



49



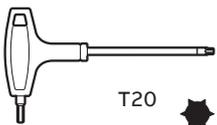
Description	Qty (pcs)	Type	Special separation needed
Screws	6	Metal	-
Contact spring	3	Metal	-
Busbar contact	3	Metal	-
Hook clamp IP cover	3	Plastic	Only in the products which has HC
Hook screw	3	Metal	Only in the products which has HC
Hook washer	3	Metal	Only in the products which has HC
Hook clamp	3	Metal	Only in the products which has HC

Tools

Flat-head screwdriver



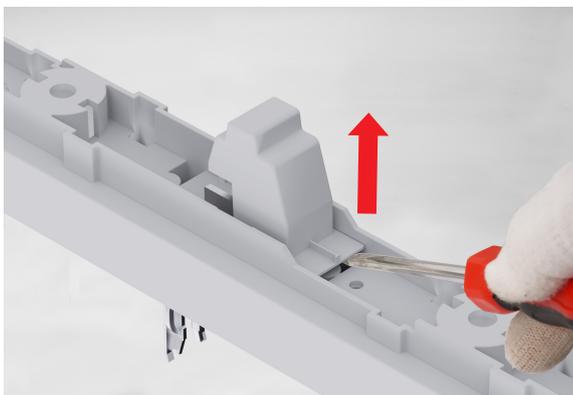
Hexagonal screwdriver



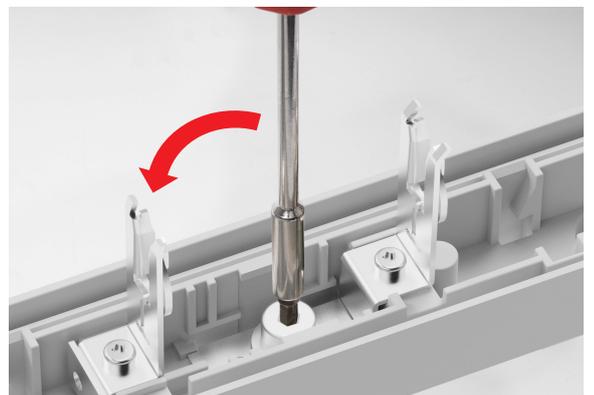
5.4.1.2.2 Z-Busbar

First, remove the Z-clamp cover and the Z-clamp IP cover using a flat-head screwdriver. Next, remove the fixing screws using a hexagonal screwdriver. After that, all parts in the Z-busbar can be taken off by hand.

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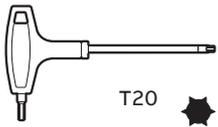




Description	Qty (pcs)	Type	Special separation needed
Screws	6	Metal	-
Contact spring	3	Metal	-
Busbar contact	3	Metal	-
Z-clamp IP cover	3	Plastic	-
Hex socket head cap screw	3	Metal	-
Cover Z-contact	3	Plastic	-
Custom nut for Z-clamp	3	Metal	-
Z-bar connector steel part	3	Metal	-
Spring for connector nut	3	Metal	-
Conical spring washer	3	Metal	-

Tools

Hexagonal screwdriver



Wrench



5.4.1.2.3 Busbar for large current

First, remove the fixing screws using a hexagonal screwdriver to take off the busbar terminals from the base. Next, remove the two fuse contact metallic sheets by unscrewing them with a hexagonal screwdriver. Then, use one spanner to hold the inside hexagon nut and another wrench to turn the hex head screw.



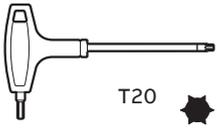
Description	Qty (pcs)	Type	Special separation needed
Screws	6	Metal	-
Screw M6X10	6	Metal	-
Hex head screw	6	Metal	-
Fuse contact	3	Metal	-
Spring lock washer	6	Metal	-
Hexagon nut	6	Metal	-
Fuse contact metallic sheet	6	Metal	-
Busbar contact	6	Metal	-

5.4.1.3 Remove the Cable terminals L1, L2, L3

On the sequence of InLine II Products, there are four different types of terminal kits. For Bolt connection, refer to section 5.4.1.3.1; for V-clamp, refer to section 5.4.1.3.2; for rear side connection (MB), refer to section 5.4.1.3.3; and for side connection (SC), refer to section 5.4.1.3.4.

Tools

Hexagonal
screwdriver



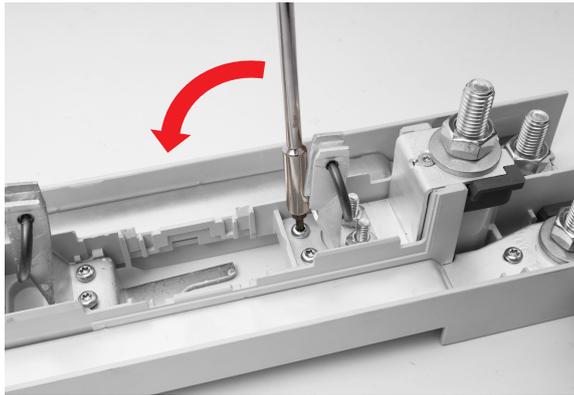
Wrench



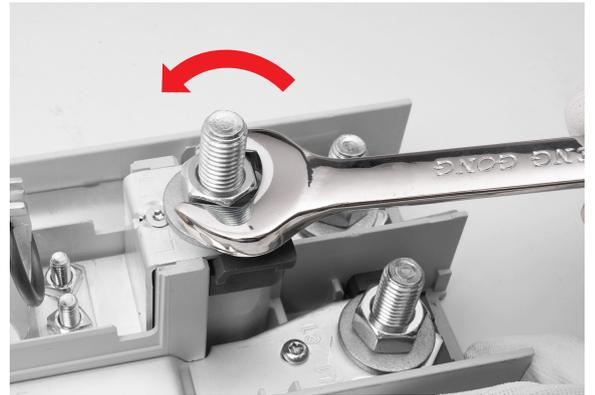
5.4.1.3.1 Bolt connection

Remove the fixing screws using a wrench and a hexagonal screwdriver, then take off the three outlet plates. Below the three outlet plates, you will see three bolts with plastic bases. These can be easily removed by hand.

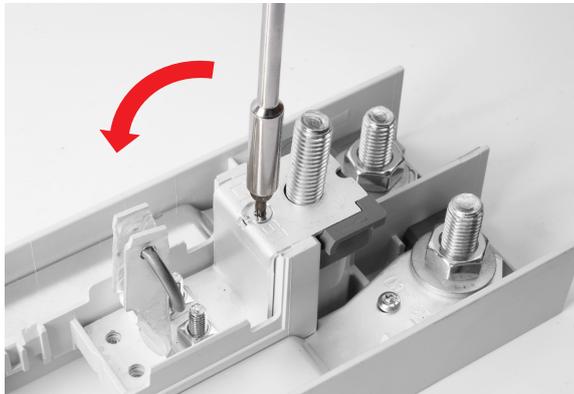
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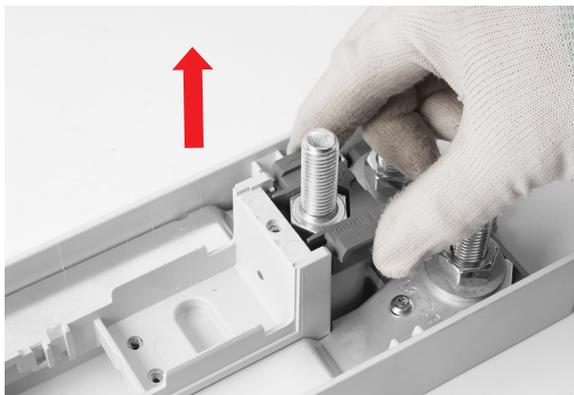
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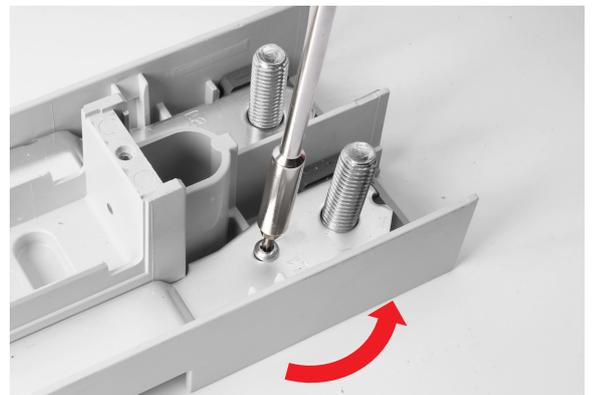
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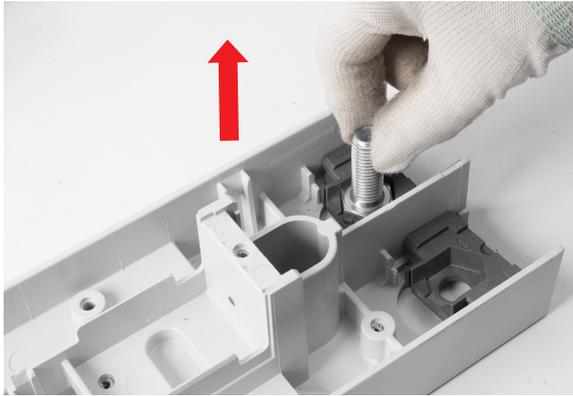
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61



For higher current (800/910A) products, there is a special terminal kit for double switches. Use a spanner and a cross screwdriver to remove the L3, L2, and L1 extended terminal bars and the nylon support.

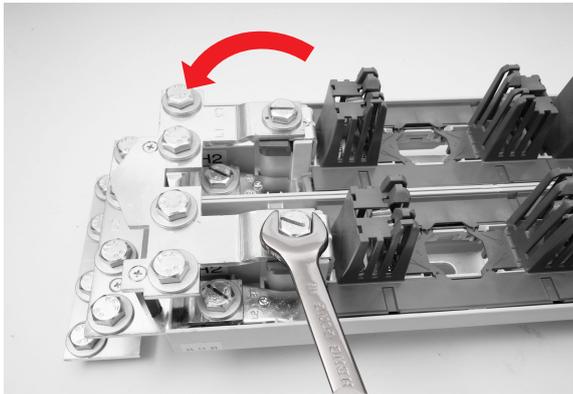
Wrench



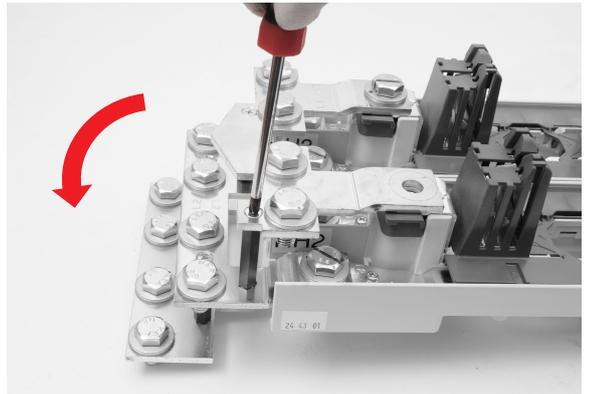
Cross
screwdriver



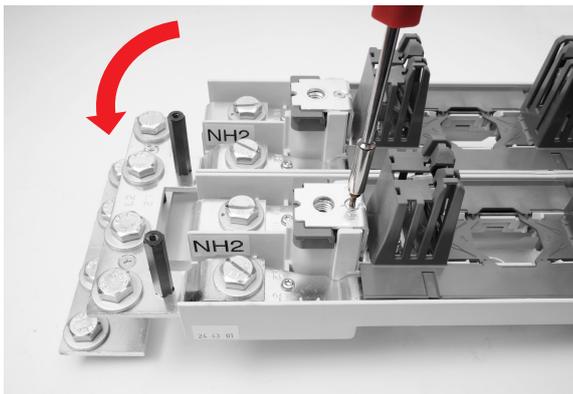
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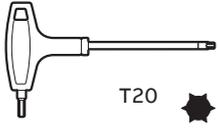


63

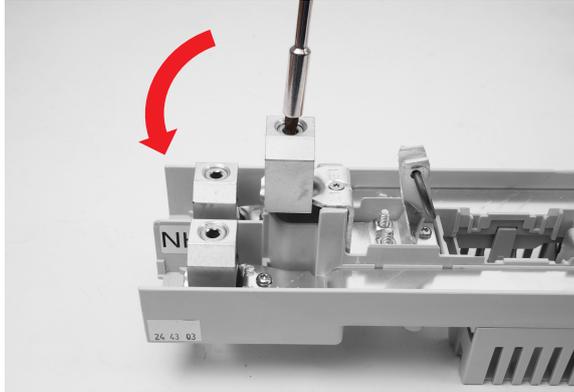
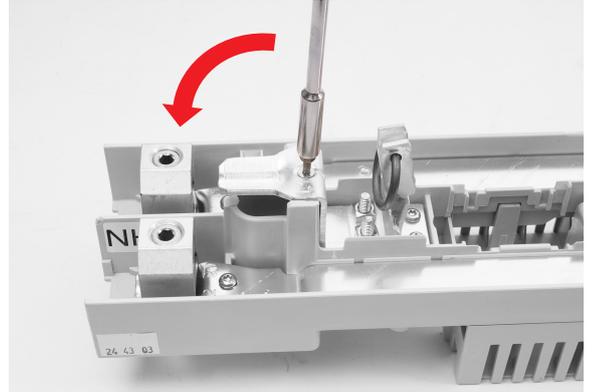
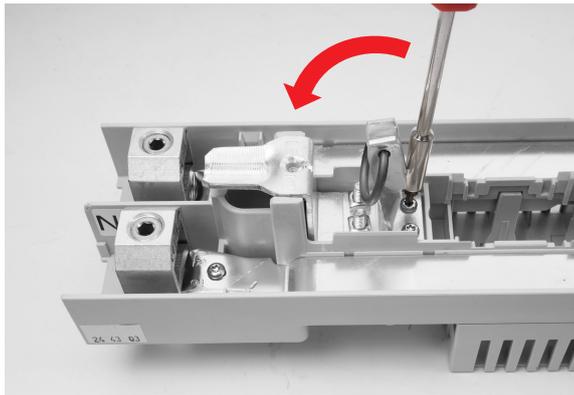
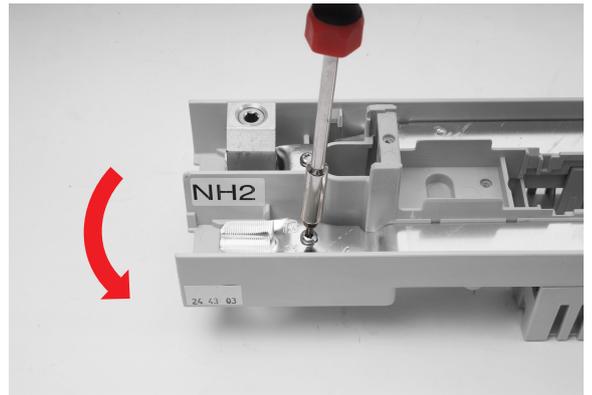
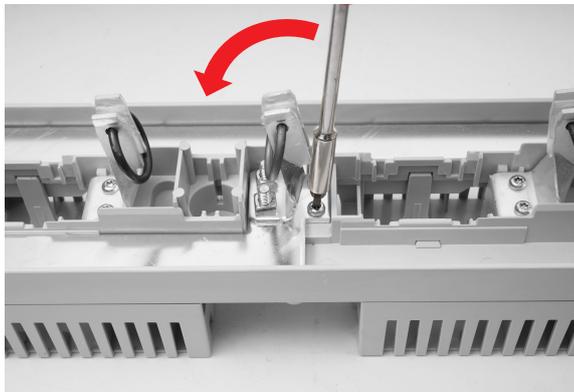
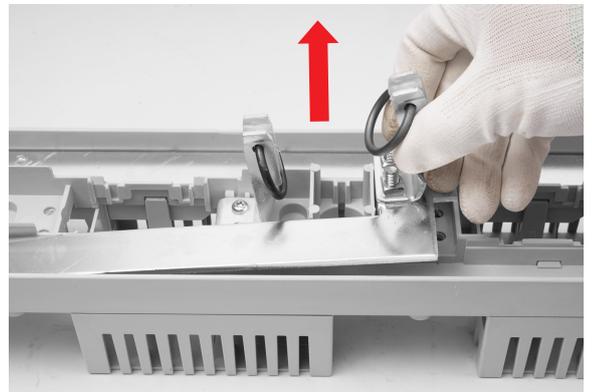


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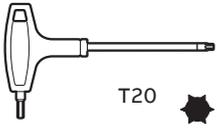
ToolsHexagonal
screwdriver**5.4.1.3.2 Integrated V-Clamp**

Remove the fixing screws using a hexagonal screwdriver, then take off the three outlet plates. Below the three outlet plates, you will see three bolts with plastic bases. These can be easily removed by hand.

65**66****67****68****69****70**

Tools

Hexagonal screwdriver



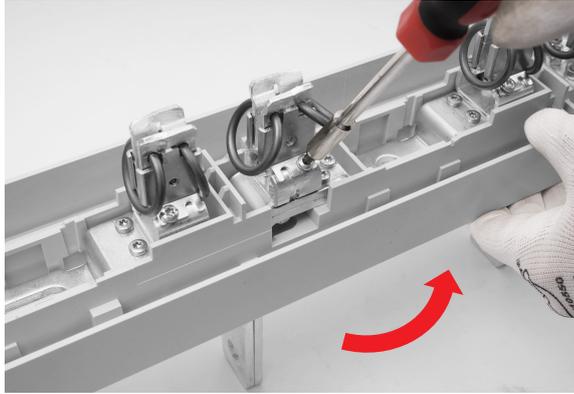
Allen key



5.4.1.3.3 Connection on rear side (MB)

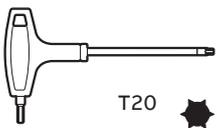
Firstly, the plastic cover can be removed by hand. Secondly, the fixing screws can be removed using a hexagonal screwdriver, and then the six inlet and outlet plates can be taken off. Lastly, the inlet and outlet plates can be disassembled using an Allen key and a hexagonal screwdriver.

71



Tools

Hexagonal screwdriver



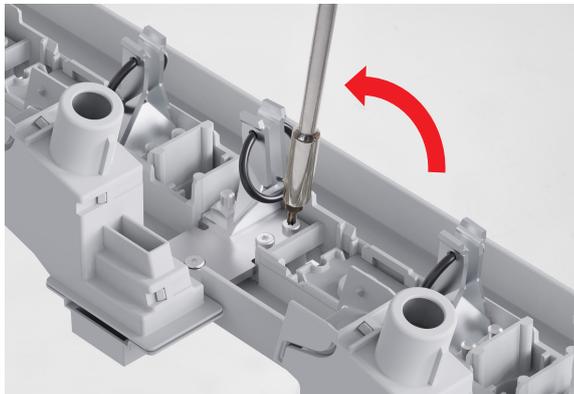
Wrench



5.4.1.3.4 Side connection (SC)

Firstly, remove the three screws with a hexagonal screwdriver to take off the entire cable terminal part. Secondly, use a flat screwdriver to remove the bottom plastic cover. After that, use an Allen key to hold the hexagonal screw in place while using a spanner to tighten the hex nut simultaneously. Lastly, use one spanner to hold the inner hexagon nut and another wrench to tighten the hex head screw.

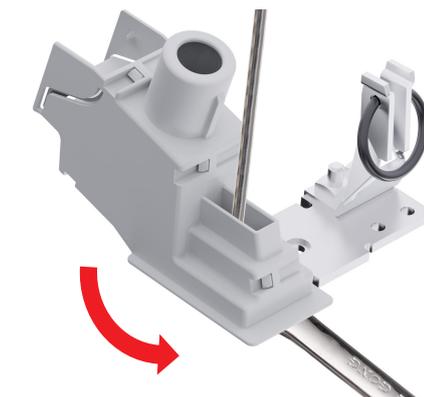
72



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74



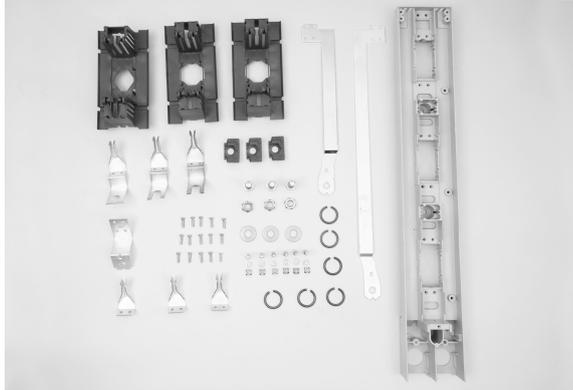
75



5.4.1.4 Summary of the Phase 5.4 – Base assembly separation

5.4.1.4.1 Bolt connection

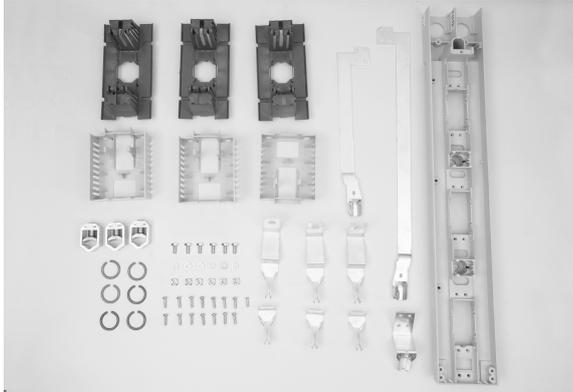
76



Description	Qty (pcs)	Type	Special separation needed
Screws	8	Metal	-
Countersunk screw	1	Metal	-
Hex head screw	6	Metal	-
Terminal hex head screw	3	Metal	If the product is large current type, then plus 12.
Terminal bar	3	Metal	-
Fuse contact	3	Metal	-
Contact spring	3	Metal	-
Spring lock washer	6	Metal	-
Conical spring washer	3	Metal	If the product is large current type, then plus 12.
Square nut	6	Metal	-
Hexagon nut	3	Metal	If the product is large current type, then plus 12.
Support for standard bolt/nut	3	Plastic	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
CT cover	3	Plastic	Only if this product have CTs
Nylon support pin	4	Nylon	Only for large current product
Extended terminal bar L1	3	Metal	Only for large current product
Extended terminal bar L2	3	Metal	Only for large current product
Extended terminal bar L3	3	Metal	Only for large current product
Cross screw	4	Metal	Only for large current product

5.4.1.4.2 Integrated V-Clamp

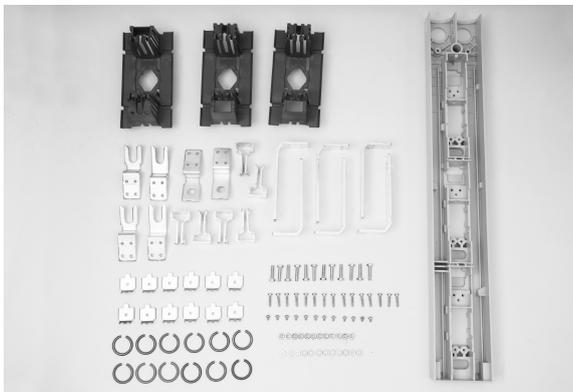
77



Description	Qty (pcs)	Type	Special separation needed
Screws	8	Metal	-
Countersunk screw	1	Metal	-
Hex head screw	9	Metal	-
Terminal bar	3	Metal	-
Fuse contact	3	Metal	-
Contact spring	3	Metal	-
Spring lock washer	6	Metal	-
Square nut	6	Metal	-
V-clamp	3	Metal	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
CT cover	3	Plastic	Only if this product have CTs

5.4.1.4.3 Connection on rear side (MB)

78

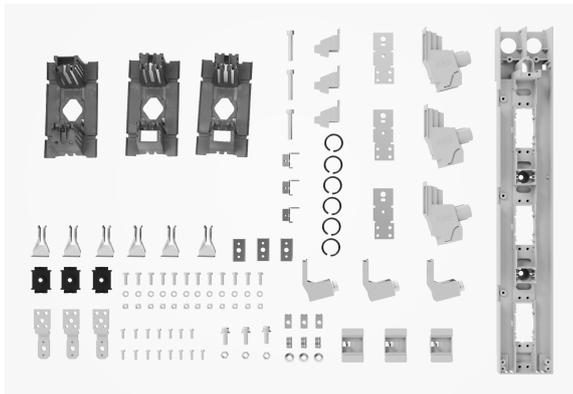




Description	Qty (pcs)	Type	Special separation needed
Screws	6	Metal	-
Screw M6X10	6	Metal	-
Hex head screw	6	Metal	-
Fuse contact	3	Metal	-
Spring lock washer	6	Metal	-
Hexagon nut	6	Metal	-
fuse contact metallic sheet	6	Metal	-
Terminal bar	6	Metal	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)

5.4.1.4.4 Side connection (SC)

79



Description	Qty (pcs)	Type	Special separation needed
Screws	9	Metal	-
Hex head screw	6	Metal	-
Splice for side-connection	3	Metal	-
Fuse contact	3	Metal	-
Contact spring	3	Metal	-
Spring lock washer	6	Metal	-
Square nut	6	Metal	-
Plastic socket	3	Plastic	-
Nut M8	3	Metal	-
Cable connector	3	Metal	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
CT cover	3	Plastic	Only if this product have CTs

5.4.2 ZHBM/ZLBM 00

Tools

Flat-head
screwdriver



5.4.2.1 Remove the plastic covers

Use two flat-head screwdrivers to pry up the two clips simultaneously on the same side, and then remove the plastic covers by hand.

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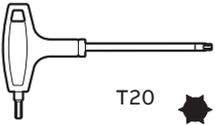


5.4.2.2 Remove the Busbar terminal L1, L2, L3

There are two types of busbar systems: flat busbar (5.4.2.2.1) and Z-busbar (5.4.2.2.2).

Tools

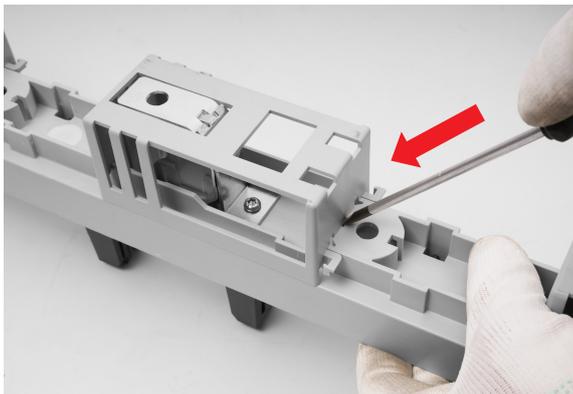
Hexagonal
screwdriver



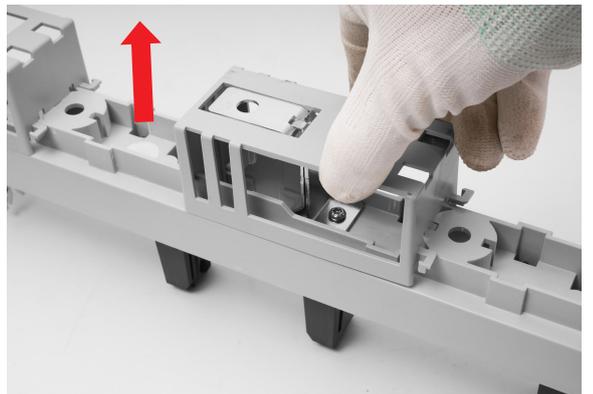
5.4.2.2.1 Flat Busbar

Remove the fixing screws using a hexagonal screwdriver, and then take off the three-entry plate. If each busbar terminal has a CT, follow these additional steps: remove the CT cover, and then use a hexagonal screwdriver to remove the support high version terminal.

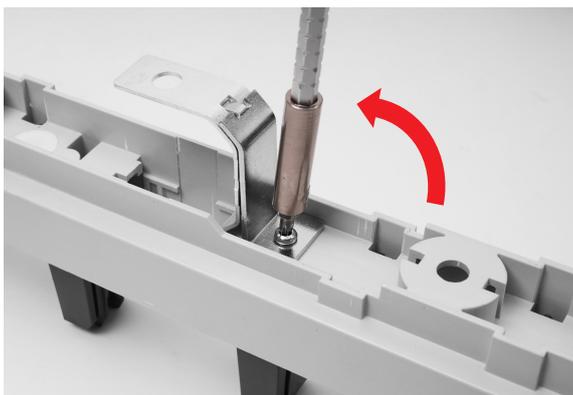
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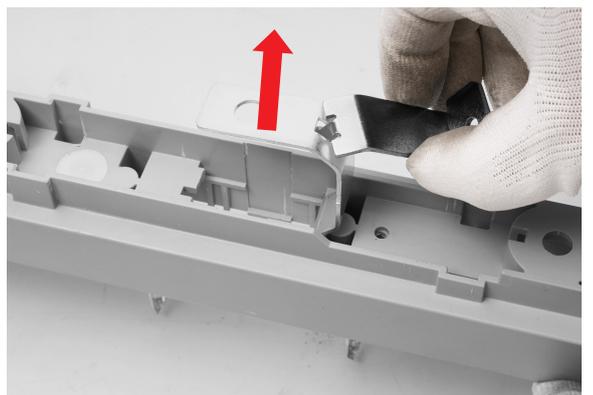
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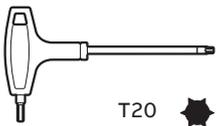
Description	Qty (pcs)	Type	Special separation needed
Screws	3	Metal	If this product has CT, then plus 3
Fuse Contact	3	Metal	-
Contact spring	3	Metal	-
support high version terminal	3	Metal	-
CT cover	3	Plastic	Only if this product have CTs

Tools

Flat-head screwdriver



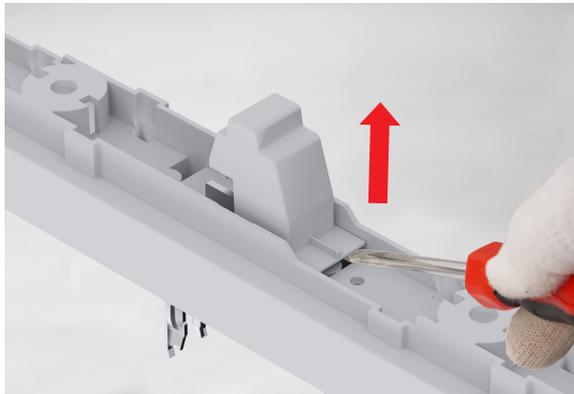
Hexagonal screwdriver



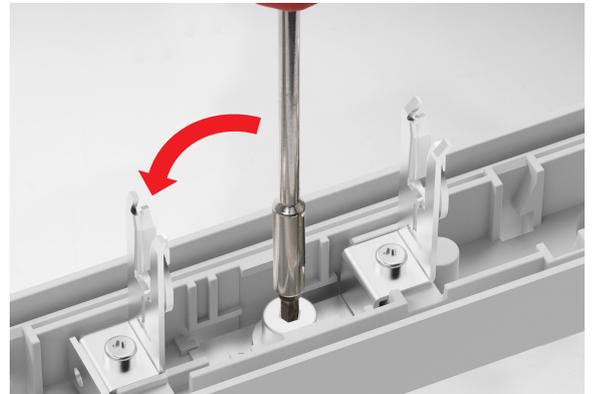
5.4.2.2.2 Z-Busbar

Firstly, remove the Z-clamp cover using a flat-head screwdriver. Secondly, remove the fixing screws using a hexagonal screwdriver and an Allen key. After that, all parts of the Z-busbar can be taken off by hand.

85



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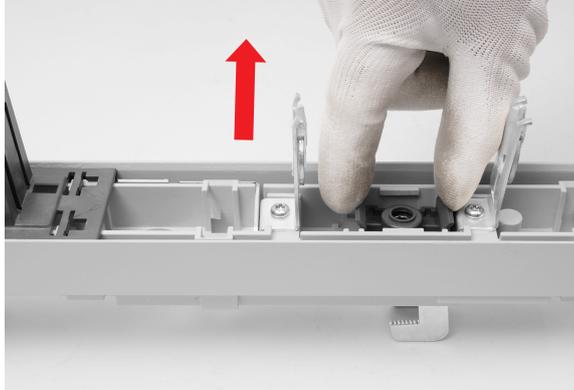


Description	Qty (pcs)	Type	Special separation needed
Screws	6	Metal	-
Contact spring	3	Metal	-
Busbar Contact	3	Metal	-
Z-clamp IP cover	3	Plastic	-
Hex Socket Hd Cap Screw	3	Metal	-
Cover Z-contact	3	Plastic	-
Custom nut for Z-clamp	3	Metal	-
Z-bar connector steel part	3	Metal	-
Spring for connector nut	3	Metal	-
Conical Spring Washer	3	Metal	-

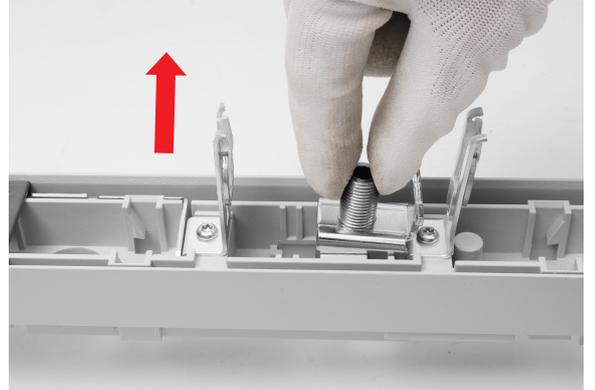
5.4.2.2.3 HC-Busbar

First, pull up the clamp support along with the entire HC part. Then, break the rivet to remove the hook washer. After that, the hook and clamp support can be easily removed from the hook screw.

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89



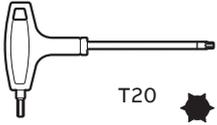
Description	Qty (pcs)	Type	Special separation needed
Screws	3	Metal	-
Contact spring	3	Metal	-
Busbar Contact	3	Metal	-
Hook clamp IP cover	3	Plastic	-
Hook screw	3	Metal	-
Hook washer	3	Metal	-
Hook clamp	3	Metal	-

5.4.2.3 Remove the Cable terminals L1, L2, L3

There are two different types of terminal kits. For bolt connection, refer to section 5.4.2.3.1; for single/double AL clamp, refer to section 5.4.2.3.2.

Tools

Hexagonal
screwdriver



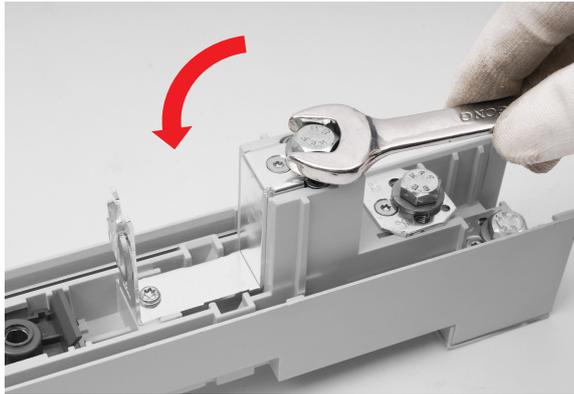
Wrench



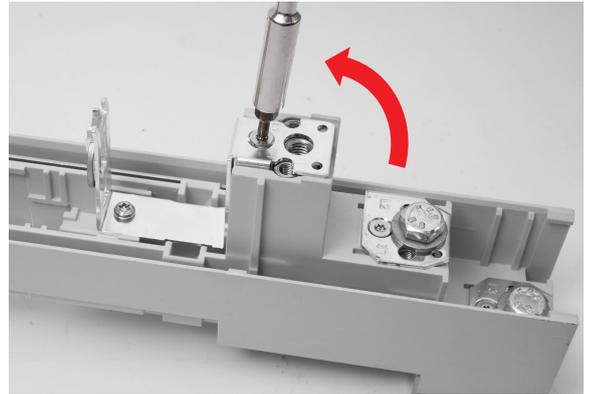
5.4.2.3.1 Bolt connection

Remove the fixing screws using a wrench and a hexagonal screwdriver, then take off the three outlet plates. Below the three outlet plates, you will see three bolts with plastic bases. These can be easily removed by hand.

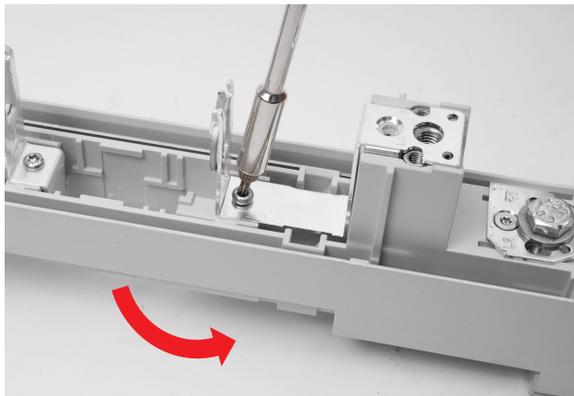
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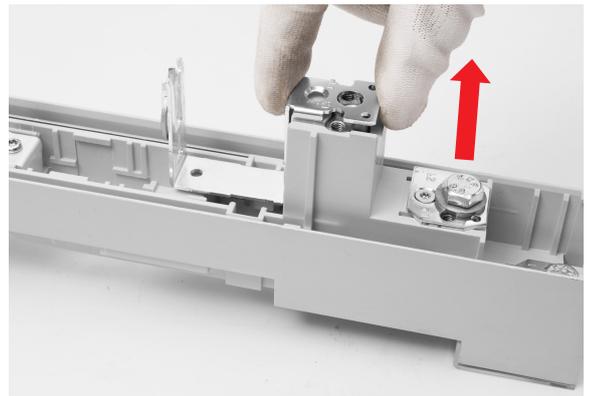
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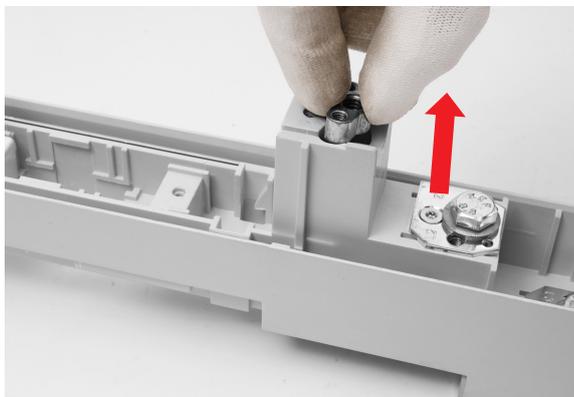
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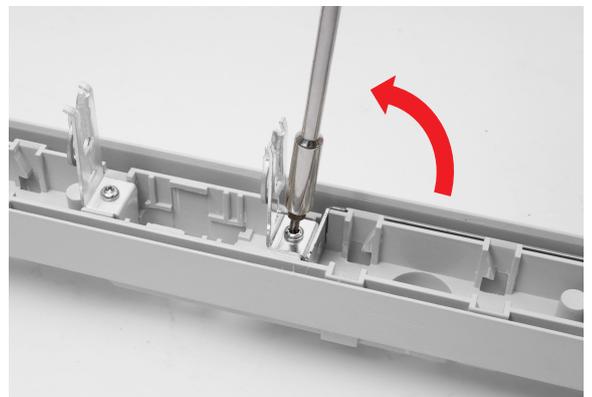
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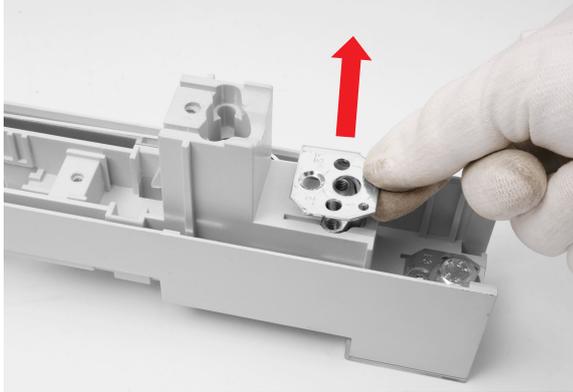
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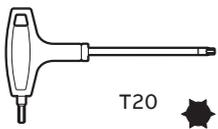
96



Description	Qty (pcs)	Type	Special separation needed
Screw	3	Metal	-
Conical Spring Washer	3	Metal	-
Countersunk screw	3	Metal	-
Hex Head Screw	3	Metal	-
XLP 00 Gjengestykke 2xM5+M8	3	Metal	-
Cable terminal	3	Metal	-
Contacts spring	3	Metal	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ZLBM00 IP cover	1	Plastic	-

Tools

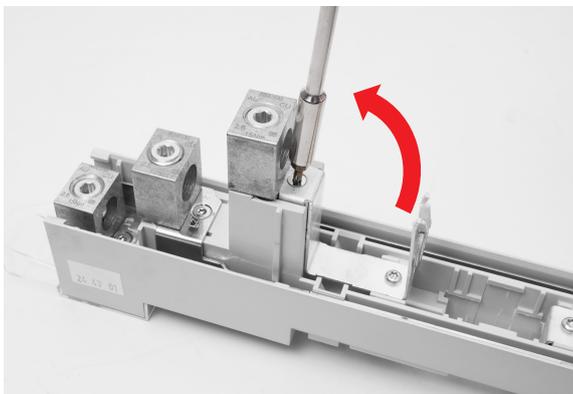
Hexagonal screwdriver



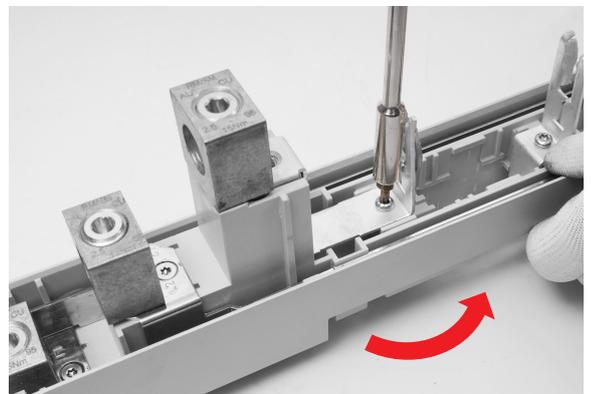
5.4.2.3.2 Single/Double AL Clamp

Remove the two fixing screws using a hexagonal screwdriver, then take off the three outlet plates. After that, roll over the outlet plate and use a hexagonal screwdriver to take off the clamp housing.

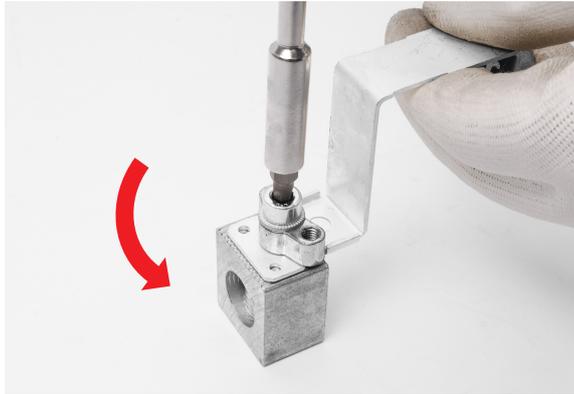
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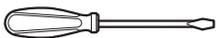
99



Description	Qty (pcs)	Type	Special separation needed
Screw	3	Metal	-
Countersunk screw	3	Metal	-
Hex Socket Hd Cap Screw	3	Metal	-
Clamp house	3	Metal	-
Contacts spring	3	Metal	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ZLBM00 IP cover	1	Plastic	-

Tools

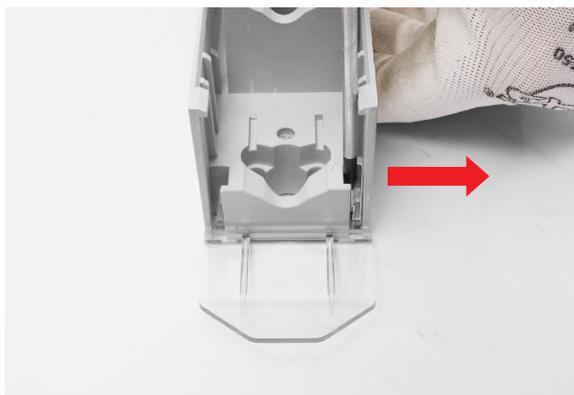
Flat-head
screwdriver



5.4.2.4 Remove the IP cover

Use a flat-head screwdriver to pry up the two clips and then remove the IP cover.

100



5.4.3 BZL/BZH

Tools

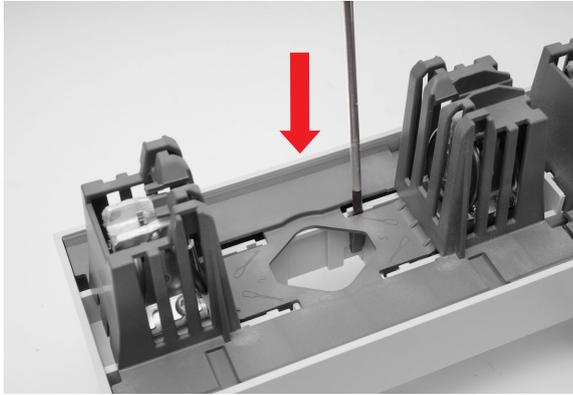
Flat-head
screwdriver



5.4.3.1 Remove the plastic covers

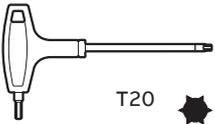
Use a flat-head screwdriver to pry up the plastic covers and remove them by hand.

101



Tools

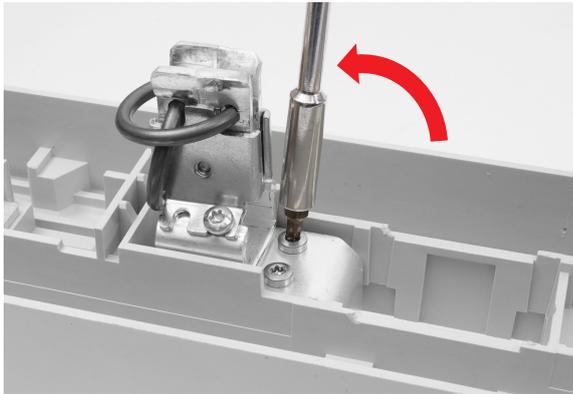
Hexagonal
screwdriver



5.4.3.2 Remove the Busbar terminal L1, L2, L3

Remove the fixing screws using a hexagonal screwdriver, then take off the three-entry plate.

102



5.4.3.3 Remove the Cable terminals L1, L2, L3

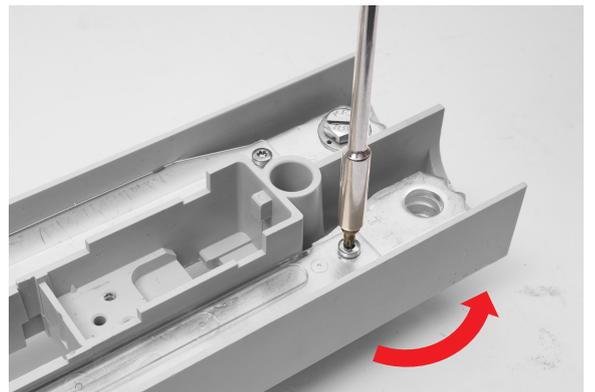
Remove the fixing screws using a wrench and a hexagonal screwdriver, then take off the three outlet plates and the two plastic covers on L1 and L2.

L1

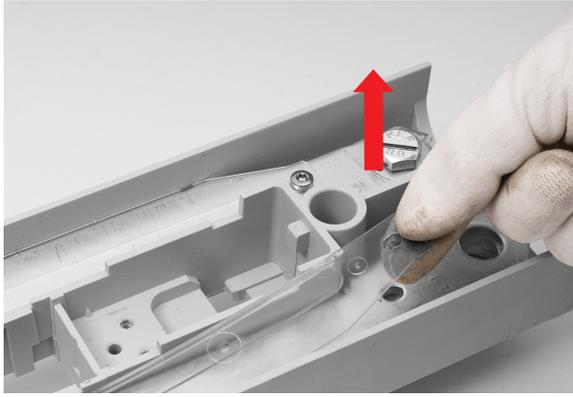
103



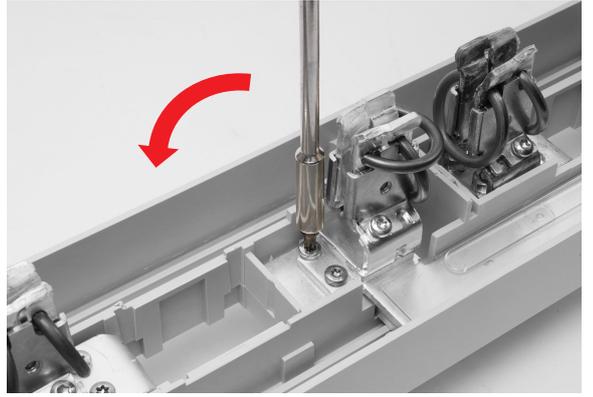
104



105

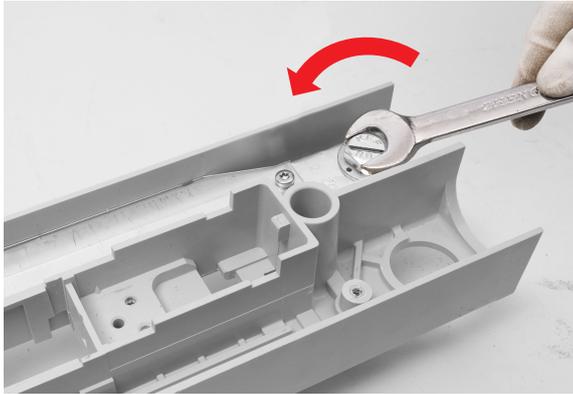


106

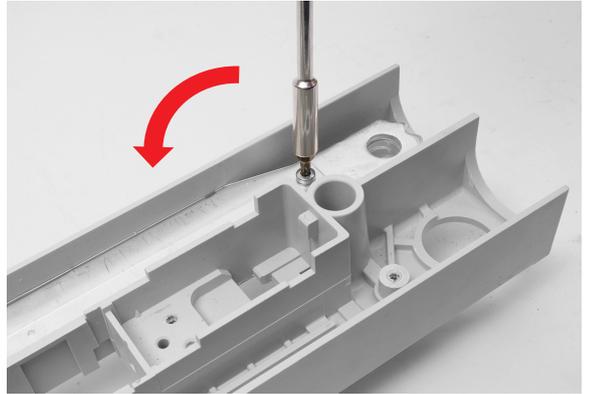


L2

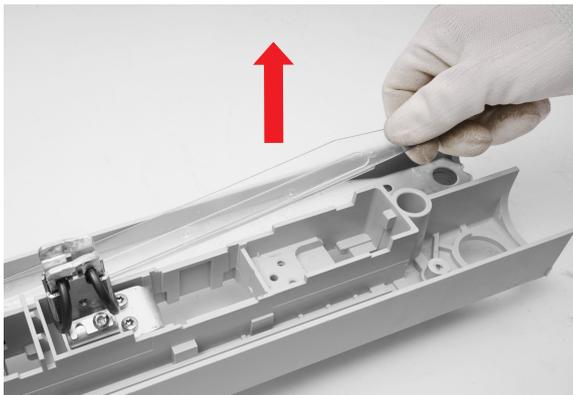
107



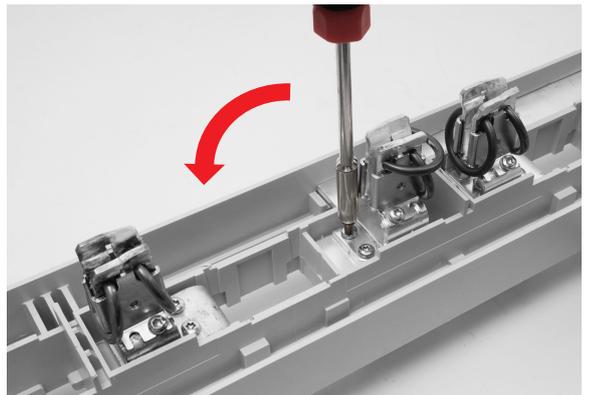
108



109

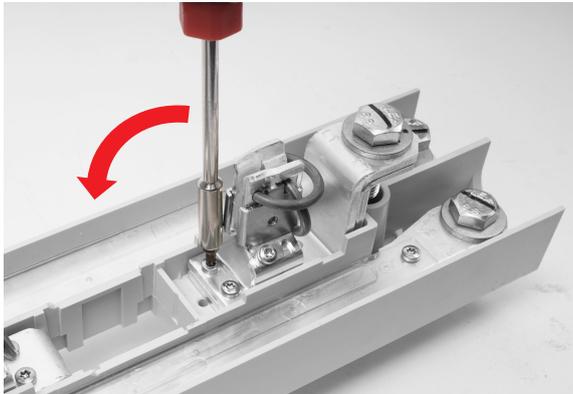


110

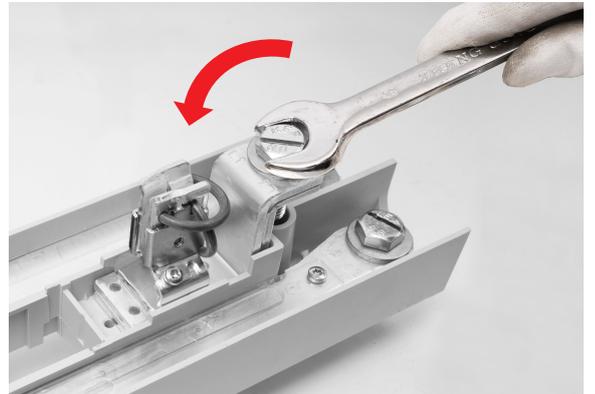


L3

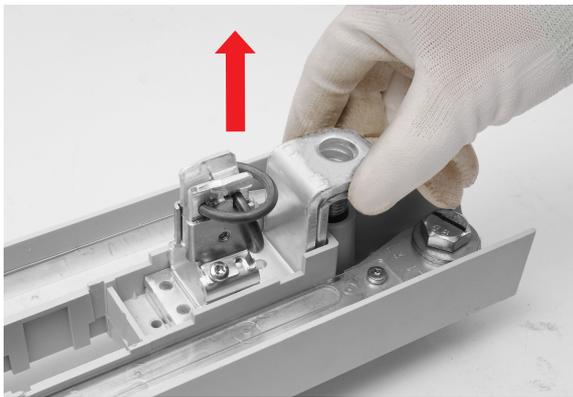
111



112

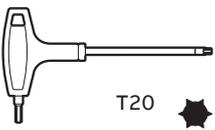


113



Tools

Hexagonal
screwdriver



T20

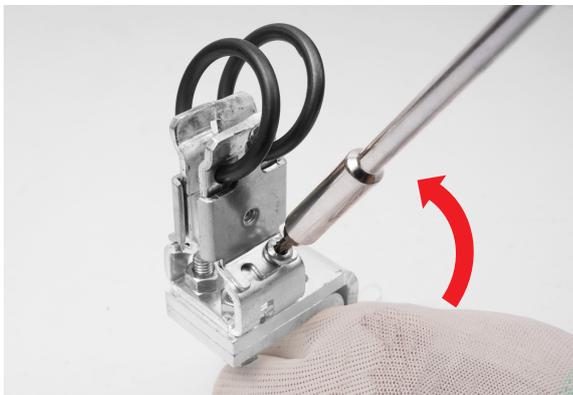
Wrench



5.4.3.4 Decommission of Busbar terminals and Cable terminals

First, remove the screw using a hexagonal screwdriver, then take off the two fuse contact metallic sheets.

114



Then, use one spanner to hold the inner hexagon nut and another wrench to tighten the hex head screw.

115



116



117



Tools

Flat-head
screwdriver

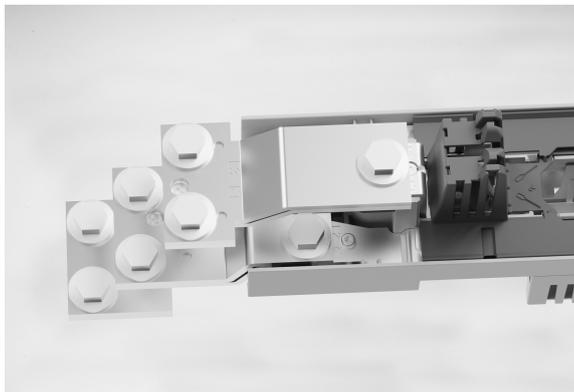


5.4.3.5 Terminal Kit (only for some special Products)

There are two types of terminal kits: Single Switch and Double Switch. The decommissioning processes are the same: use a wrench and a cross screwdriver to remove the L3, L2, and L1 extended terminal bars and the nylon support.

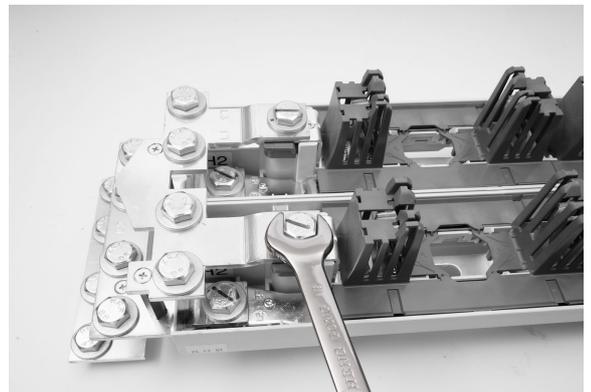
Single Switch

118



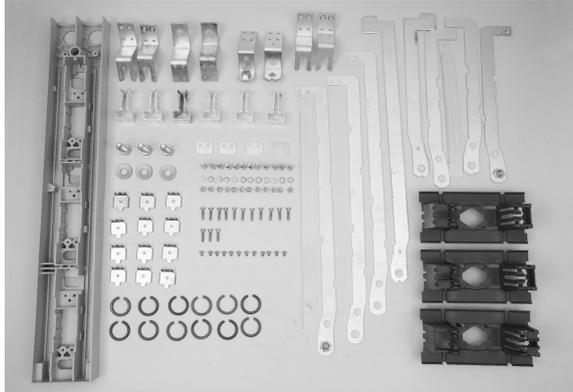
Double Switch

119



5.4.3.6 Summary of the Phase 5.2.3 – Base assembly of BZL/BZH separation

120



Description	Qty (pcs)	Type	Special separation needed
Screw	38	Metal	-
Terminal Hex Head Screw	3	Metal	If the product has terminal kit (single switch), then plus 6; if the product has terminal kit (double switch), then plus 12.
Terminal Countersunk screw	3	Metal	If the product has terminal kit (single switch), then plus 6; if the product has terminal kit (double switch), then plus 12.
Hexagon Nut	12	Metal	-
Busbar terminal L1_L3	4	Metal	-
Busbar terminal L2	2	Metal	-
Fuse Contact	6	Metal	-
Contact spring	6	Metal	-
fuse contact metallic sheet	12	Metal	-
terminal copper filling piece	4	Metal	-
Spring Lock Washer	12	Metal	-
Conical Spring Washer	3	Metal	-
Terminal-bar L1	4	Metal	-
Terminal-bar L2	4	Metal	-
Terminal-bar L3	2	Metal	-
Plastic insulating bar L1	1	Plastic	-
Plastic insulating bar L2	1	Plastic	-
Contact cover	3	Plastic	-
Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Extended terminal bar L1 (Single Switch)	2	Metal	Only if this product has Terminal Kit (Single Switch)
Extended terminal bar L2 (Single Switch)	2	Metal	Only if this product has Terminal Kit (Single Switch)
Extended terminal bar L3 (Single Switch)	2	Metal	Only if this product has Terminal Kit (Single Switch)
Distanse M5x50 Nylon 25%GF	2	Nylon	Only if this product has Terminal Kit. And if the Terminal Kit is double switch, then plus 2.
Extended terminal bar L1 (Double Switch)	3	Metal	Only if this product has Terminal Kit (Double Switch)
Extended terminal bar L1 (Double Switch)	3	Metal	Only if this product has Terminal Kit (Double Switch)
Extended terminal bar L1 (Double Switch)	3	Metal	Only if this product has Terminal Kit (Double Switch)
Cross Screw	4	Metal	Only if this product has Terminal Kit (Single Switch or Double Switch)

5.5 Phase 5 – separation of accessories

All of these accessories can be found in this section. For EFM, refer to section 5.5.1; for ITS 2.1, refer to section

5.5.1 EFM kit

Tools

Flat-head
screwdriver



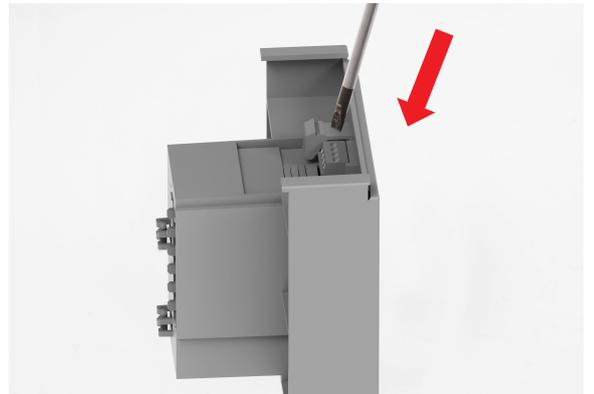
5.5.1.1 Remove EFM from the EFM base

Use your fingers to unlatch the EFM while simultaneously using a flat-head screwdriver to pry it out from the rear.

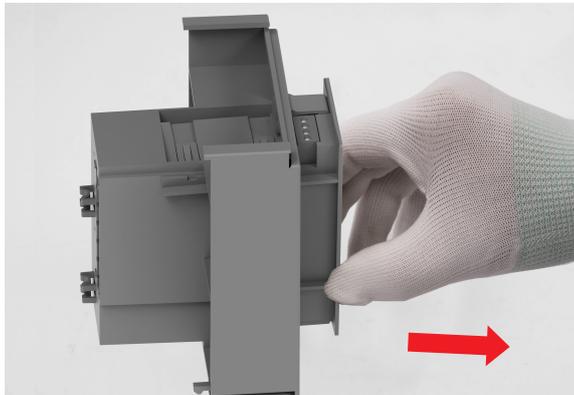
121



122

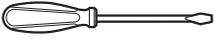


123



Tools

Flat-head
screwdriver



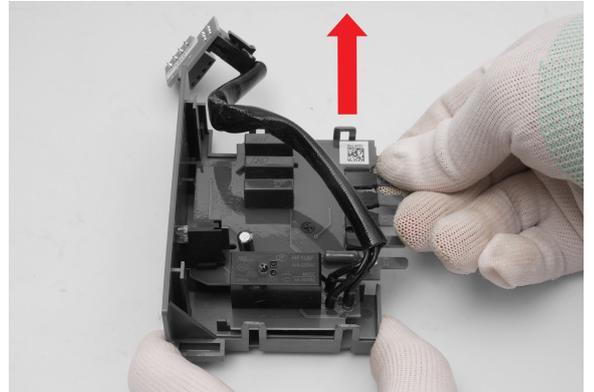
5.5.1.2 Open the EFM housing

Use a flat-head screwdriver to unlatch the four clips on both sides of the EFM housing. Then, the EFM multi-plug can be removed by hand.

124

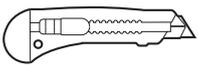


125



Tools

Cutter



5.5.1.3 Remove the EFM label

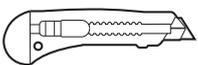
Use a cutter to lift a corner of the label, then remove it by hand.

126



Tools

Cutter



5.5.1.4 Remove the EFM data label

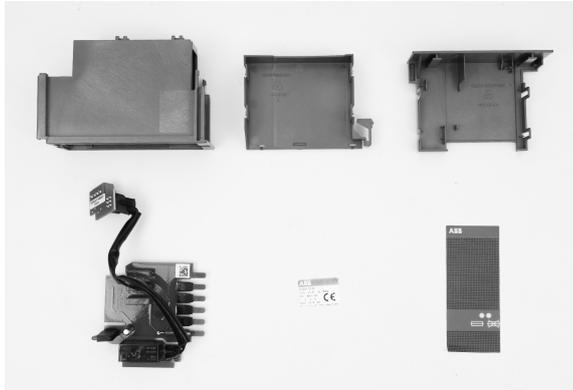
Use a cutter to lift a corner of the label, then remove it by hand.

127



5.5.1.5 Summary of the Phase 5.5.1 – EFM kit

128



Description	Qty (pcs)	Type	Special separation needed
EFM Base	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
EFM housing bottom	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
EFM housing top	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
EFM multiplug	1	Circuit board	-
Inline/Slimline AC	1	Metal	-
EFM label	1	Plastic	-
EFM data Label	1	Plastic	-

Tools

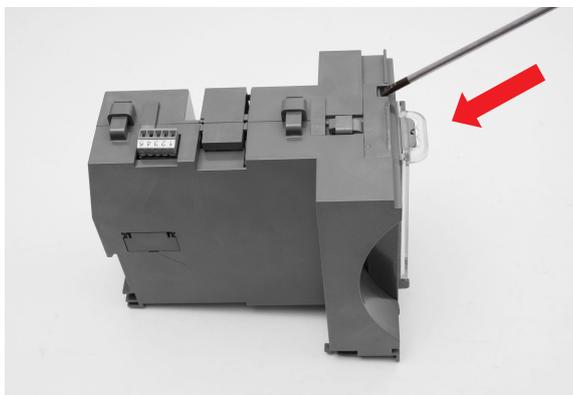
Flat-head
screwdriver

5.5.2 ITS 2.1

5.5.2.1 Open and take off the Adapter cover

Use a flat-head screwdriver to push down the clip, then take off the adapter cover.

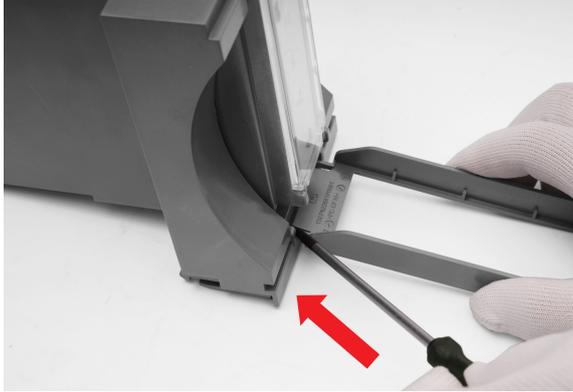
129



130

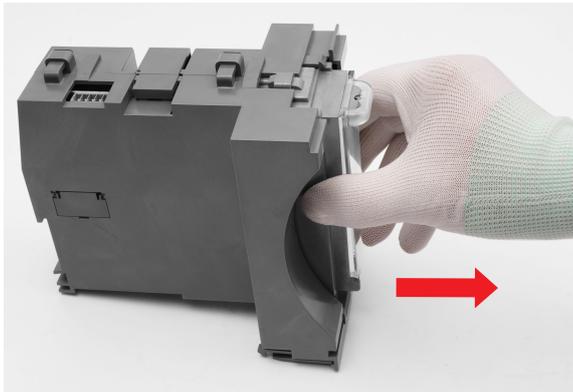


131



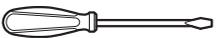
5.5.2.2 Take off the New Assembly Unit
Remove the new assembly unit by hand.

132



Tools

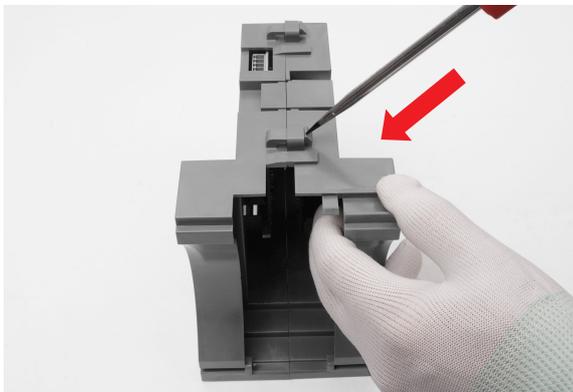
Flat-head
screwdriver



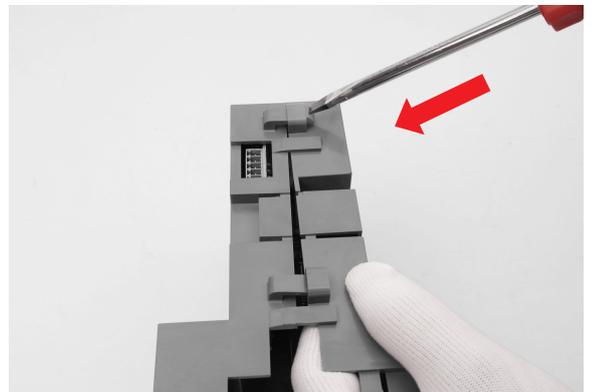
5.5.2.3 Separate the Adapter plate

Use a flat-head screwdriver to unlatch the four clips on both sides of the adapter plate. Then, take out the ITS 2.1 backplate assembly unit. The cover for the DIP switch can be taken off by hand.

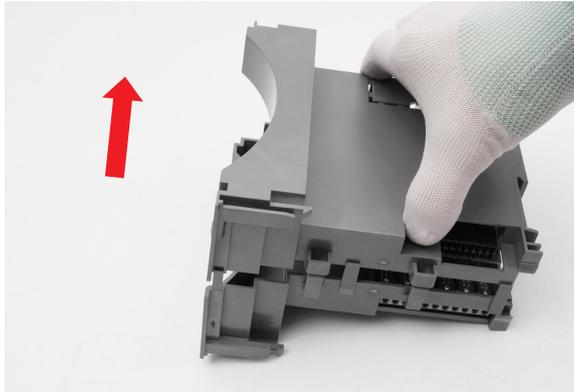
133



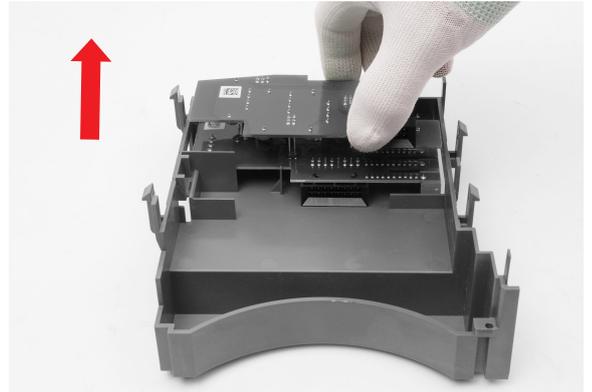
134



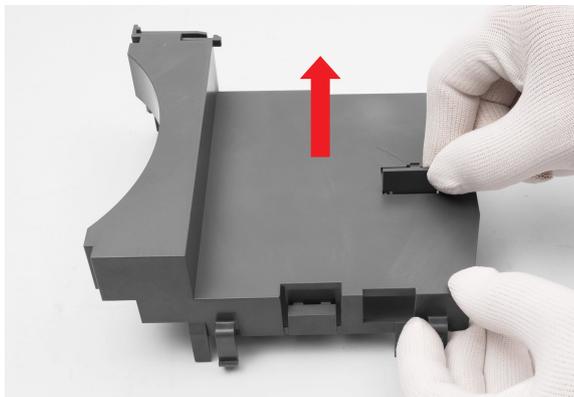
135



136



137



Tools

Flat-head
screwdriver



5.5.2.4 Separate the ITS 2.1 New Assembly Unit

First, remove the Transparent Cover. Next, use a flat-head screwdriver to unlatch the clip at the top of the New Assembly Unit. Then, open the front cover to take out the PCBA Assembly Unit.

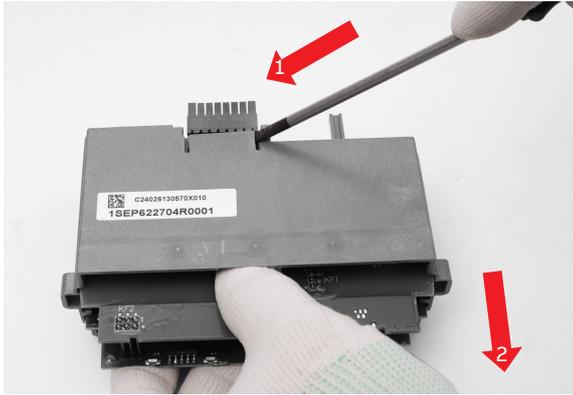
138



139

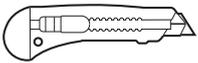


140



Tools

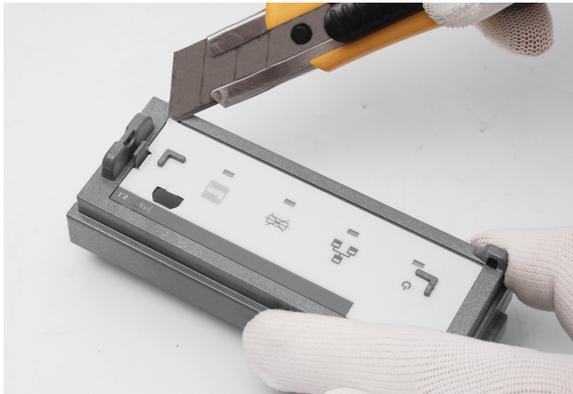
Cutter



5.5.2.5 Remove the label ITS2 label for display

Use a cutter to lift a corner of the label, then remove it by hand.

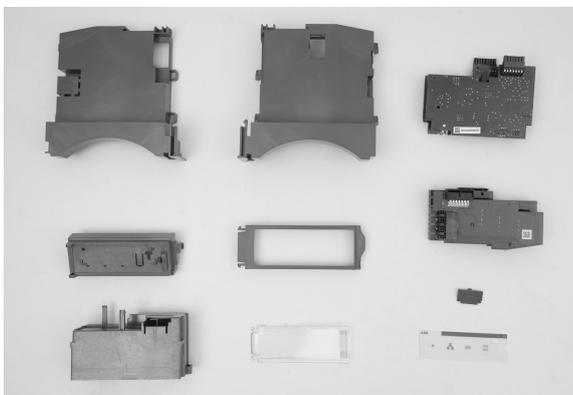
141



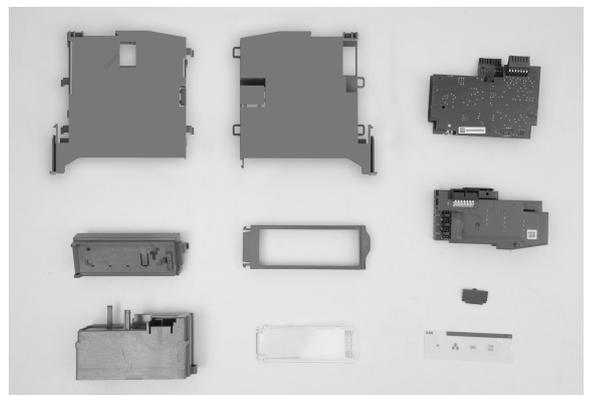
5.5.2.6 Summary of the Phase 5.5.2 – ITS 2.1 Module

Figure 142 for size 123, figure 143 for size00, they have the same disassemble process.

142



143



Summary table as below:



Description	Qty (pcs)	Type	Special separation needed
ITS2.1 Adapter cover	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ITS2.1 Adapter plate left	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ITS2.1 Adapter plate right	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
Cover for DIP switch	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ITS2 Housing rear	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ITS2 Housing front	1	Plastic	Yes (thermoplastic containing brominated flame retardants)
ITS2 label for display	1	Plastic	-
PCBA Assembly Unit	1	Circuit board	-
Backplate Assembly Unit	1	Circuit board	-

6. Energy consumption for InLineII decommissioning

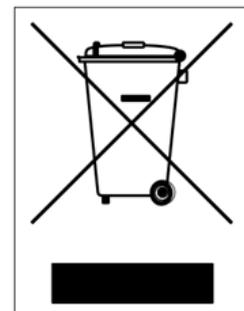
All listed step-by-step operations are performed manually.
As a result, carbon emissions can be considered negligible.

7. 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 compliance with Directive 2012/19/EU (crossed-out wheeled bin symbol):

Important Notice: Do not dispose of the entire end-of-life product as regular waste. Follow the decommissioning steps outlined in this instruction manual. Ensure all components are separated for appropriate disposal, as indicated in the summary table above, and in accordance with all applicable local laws and regulations.





Contact us

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

abb.com/lowvoltage