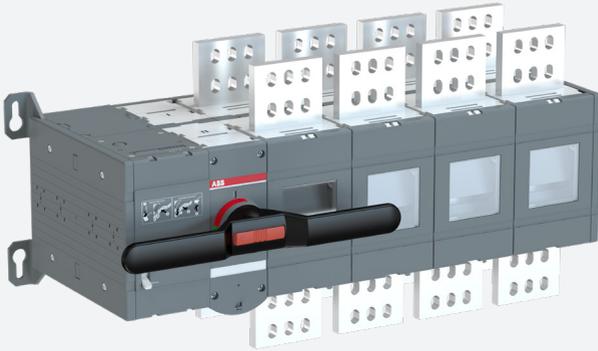


FOR RECYCLING PURPOSES ONLY

# Disassembly Instructions

Motorized change-over switches  
OTM2000–2500\_C



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# Important information

This document shows the disassembly process of OTM2000–2500\_C motorized change-over switches. Accessories, such as shafts, clamps, shrouds, neutral links and auxiliary contacts are not included. **Note! This document is for recycling purposes only.**

## Safety Notes

Before starting the disassembly process it is mandatory to put the motorized change-over switch in open position.

Disassembly of motorized change-over switches must be performed by qualified and skilled personnel in the electrical field (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) and having a detailed knowledge of motorized change-over switches.

Disassembly must be done in an ergonomic workspace which can ensure the protection of the person doing the disassembling.

Applicable national legislation and international standards in force at the time of the disassembly of the motorized change-over switches must be taken into account in addition to the prescriptions illustrated in this document.

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.

## Personal Protective Equipment (PPE)

When doing the disassembling following safety Personal Protective Equipment (PPE) must be worn:

Glasses



Gloves



Safety shoes



Protective clothes



## Tools

The disassembly process requires the use of tools (e.g. screwdriver, torx key, pliers). Tools to be used are specified inside each phase of the disassembly process.

## Disassembly process

For each phase of the disassembly process the following information is provided:

- Part/parts to be disassembled (title of the phase)
- Tools to be used
- Description of actions to be performed
- Pictures showing actions to be performed
- List, quantity and picture of disassembled parts with an indication about separate treatment (when applicable)
- In case of potential hazards signal below is reported:



# Disassembly of the motorized change-over switch

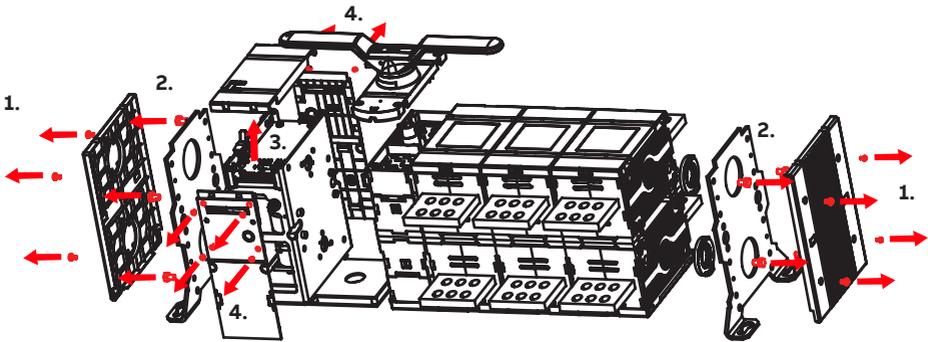
## Phase 1,2,3,4 – End plates, mounting plates, top cover

1. Use a torx key (size 25) to unscrew the 8 screws fixing the end plates to the motorized change-over switch.

2. Use a socket wrench (13 mm) to unscrew the 8 screws fixing the mounting plates to the motorized change-over switch. Remove the contact guide supports.

3. Remove the top cover of the motor operator with the help of a flat screwdriver.

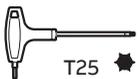
4. Use a torx key (size 20) to unscrew the 8 screws fixing the side covers to the motor operator.



### Tools

#### Tools

Torx key (size 25)



T25

Flat screwdriver

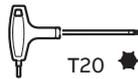


Socket wrench



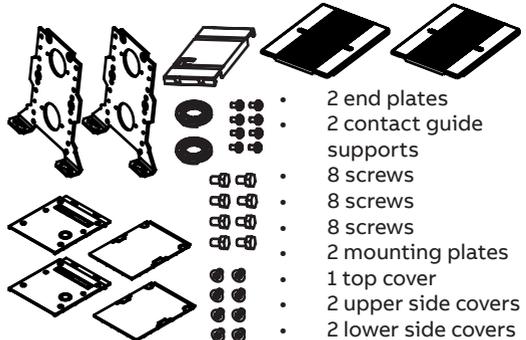
socket 13 mm

Torx key (size 20)



T20

### Disassembled parts



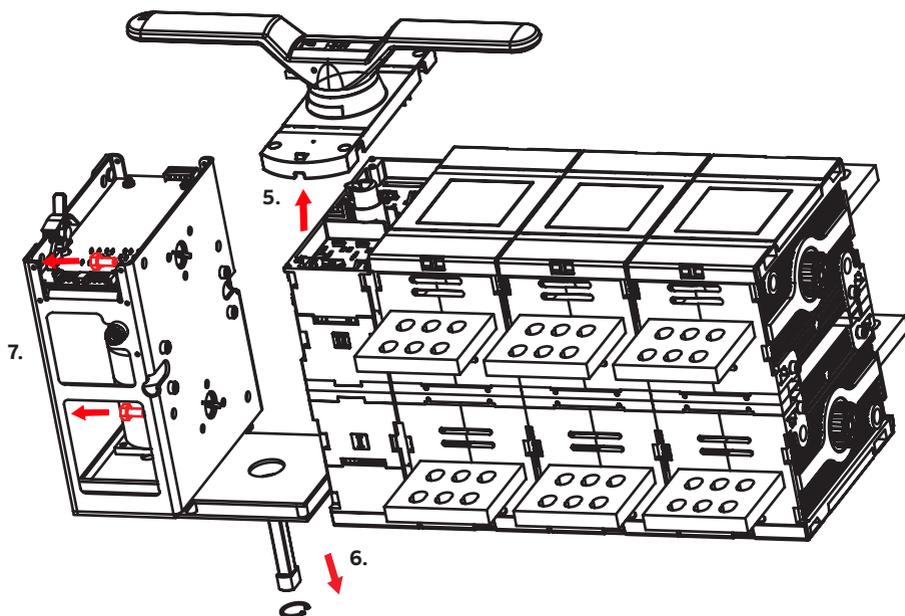
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### Phase 5,6,7 – Transmission shaft, motor operator, handle kit

5. Separate the handle kit from the change-over switch (see instructions on the page 8).

6. Use pliers to separate circlip and transmission shaft from the motor operator.

7. Unscrew the 4 screws fixing the motor operator to the change-over switch.




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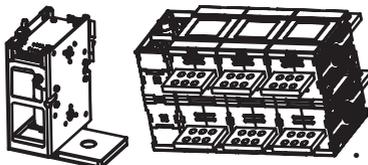
#### Tools

Pliers




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#### Disassembled parts

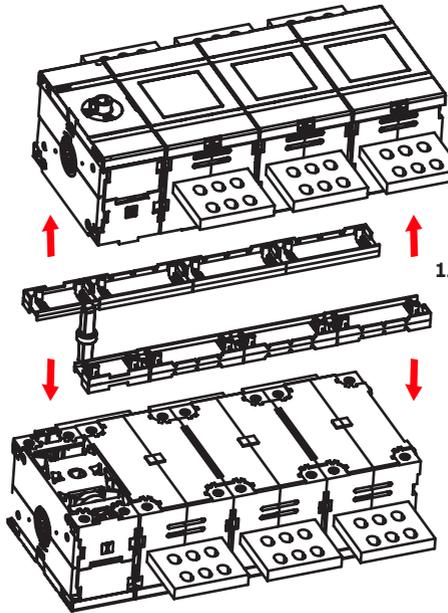


- 1 motor operator
- 4 screws
- 1 handle kit
- 1 change-over switch
- 1 transmission shaft
- 1 circlip

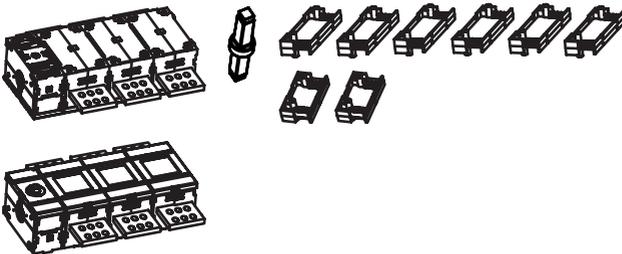
# Disassembly of the change-over switch

## Phase 1 – Switch-disconnectors and intern covers

1. Separate the switch-disconnectors and intern covers from each other manually.



## Disassembled parts

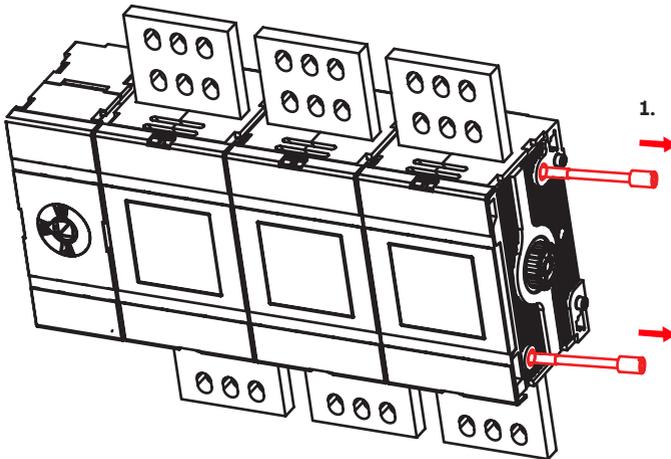


- 6 intern protections R5
- 2 cover mechanisms R4
- 2 switch-disconnectors
- 1 joint

# Disassembly of the switch-disconnector

## Phase 1 – Stud screws

Use a flat screwdriver to unscrew the stud screws fixing the poles to the mechanism.

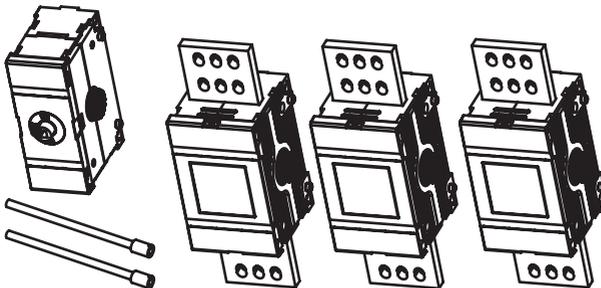


## Tools

Flat screwdriver



## Disassembled parts



- 2-4 stud screws
- 1 mechanism
- 1-4 poles

# Disassembly of the handle kit

## Phase 1,2,3 – Handle and other parts

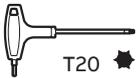
1. Remove the handle by pressing on the clip (marked with red) and pulling the handle up.

2. Use a torx key (size 20) to unscrew the 4 screws.

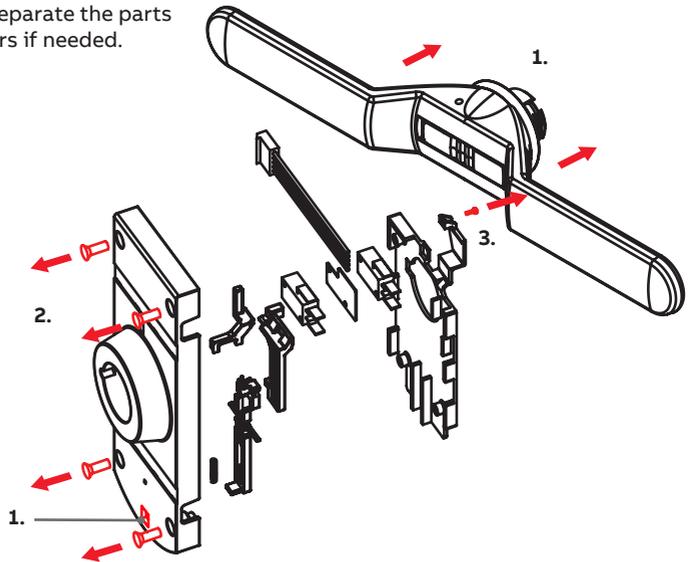
3. Unscrew the 1 screw. Separate the parts from each other. Use pliers if needed.

### Tools

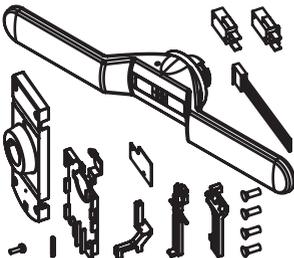
Torx key (size 20)



Pliers



### Disassembled parts

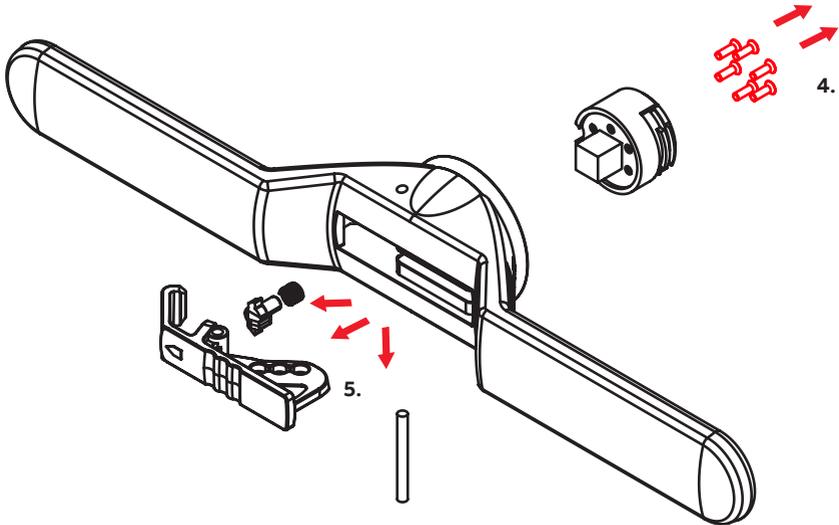


- 4 screws
- 1 screw
- 1 cover
- 1 guide
- 1 compression spring
- 1 lock
- 1 bottom plate
- 1 mechanism for micros
- 1 electric harness
- 1 insulator
- 1 handle

### Phase 4 & 5 – Handle parts

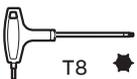
4. Use a torx key (size 8) to unscrew the 6 screws and to separate the shaft from the handle.

5. Separate rest of the parts from each other.

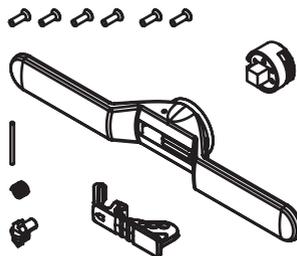


### Tools

Torx key (size 8)



### Disassembled parts

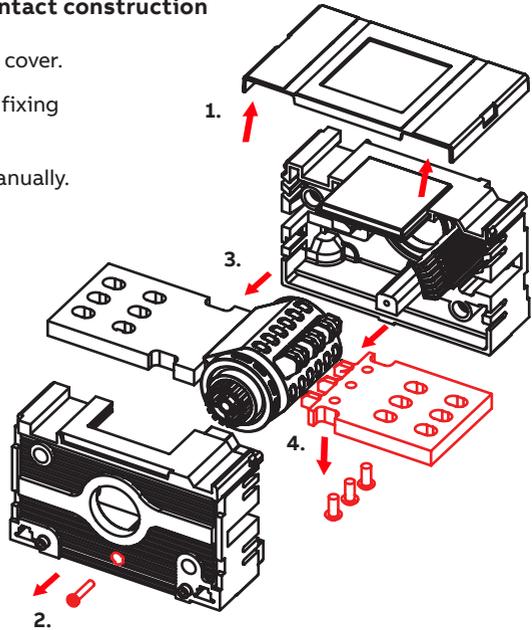


- 1 handle
- 1 compression spring
- 1 locking pin
- 1 lock plunger
- 1 slotted plug
- 1 shaft
- 6 screws

# Disassembly of the pole

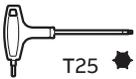
## Phase 1 to 4 – Cover, frame and contact construction

1. Use a flat screwdriver to remove the cover.
2. Use a torx key to unscrew the screw fixing the frames to each other.
3. Remove the contact construction manually.
4. Remove dome headed steel rivets and fixed contact manually.



### Tools

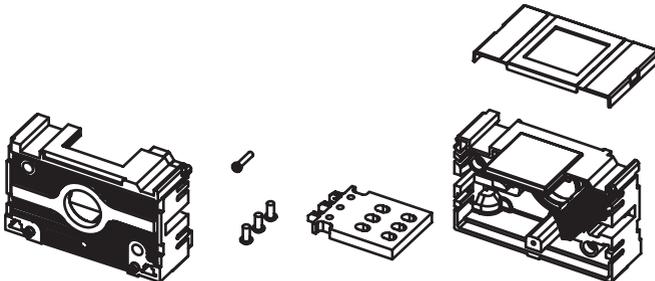
Torx key (size 25)



Flat screwdriver



### Disassembled parts

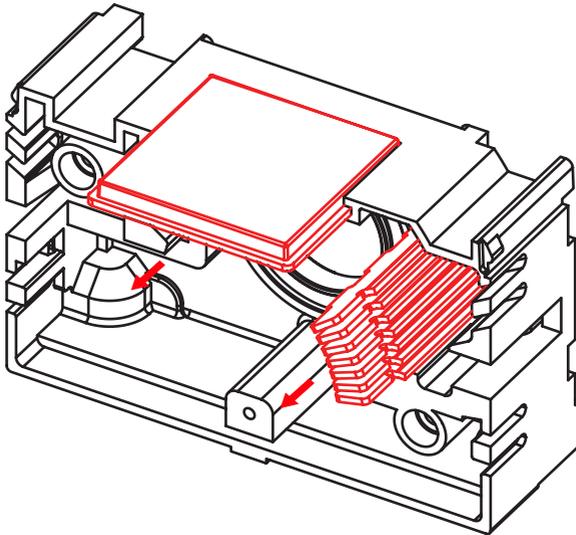


- Frame A + window and arc plates
- Frame B
- 1 contact construction
- 1 fixed contact
- 1 screw
- 1 cover
- 3 dome headed steel rivets

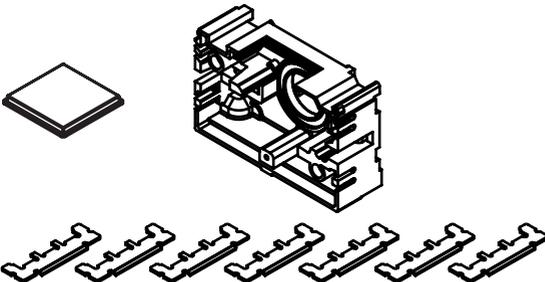
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**Phase 5 – Arc plates and window**

Remove arc plates and window from frame A manually.



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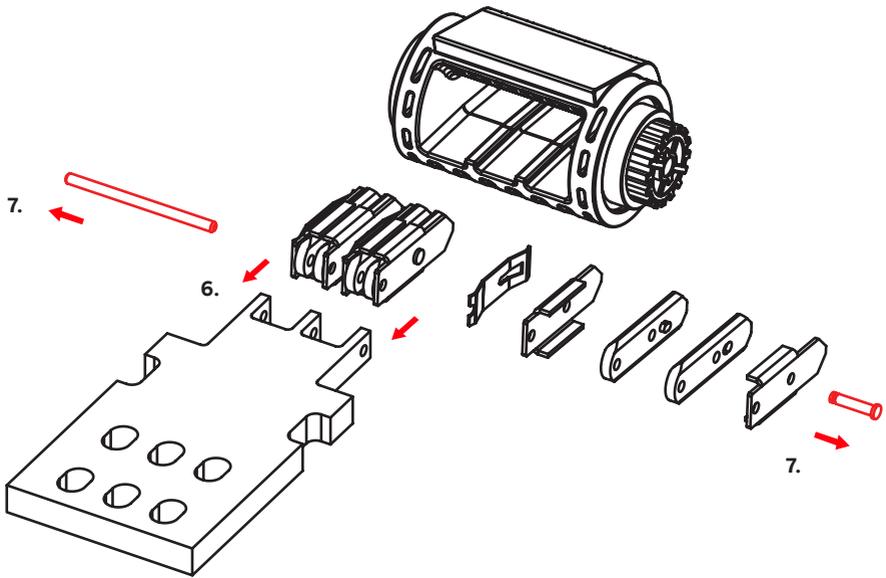
**Disassembled parts**

- Frame A
- Window
- 7 arc plates

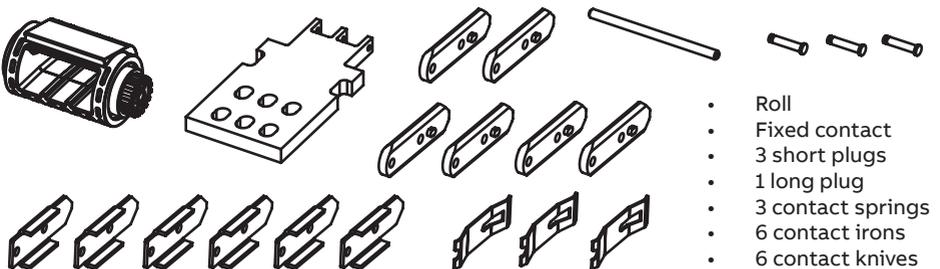
**Phase 6 & 7 – The contact construction**

6. Remove the second fixed contact and knife structures from the roll manually.

7. Separate contact knives, contact springs and contact irons from each other by removing plugs.

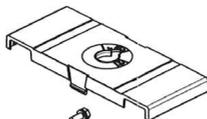


**Disassembled parts**

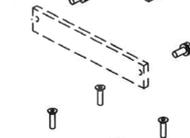


# Disassembly of the mechanism

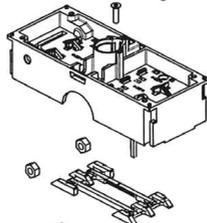
1. Remove the cover with the help of a flat screwdriver.



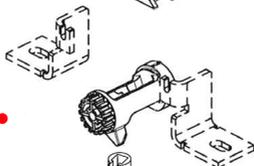
2. Unscrew the 4 screws with a torx key to remove the frame.



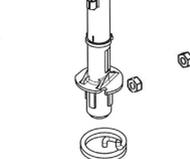
3. Remove hexnuts and contact guide support.



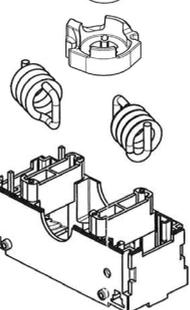
4. Remove the lever.



5. Remove pipeshaft, lever and rhythm spring.



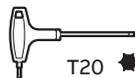
6. Remove the springs using pliers.



**Note!** Pay special attention to tensioned springs. Use personal protective equipment.

## Tools

Torx key (size 20)



T20

Flat screwdriver



Pliers



## Disassembled parts

- Frame
- 2 springs
- 4 steel hex nuts
- Lever
- Pipeshaft
- Lever
- Rhythm spring
- Frame
- 4 screws
- Cover
- Contact guide support

# Component list

## Motorized change-over switch OTM2000–2500\_C

Component name	Quantity	Material(s)	Weight (g/pc)
Change-over switch	1	See component list	53585
End plate	2	Polycarbonate	169
Mounting plate	2	Steel	1740
Steel hex screw	4	Steel	6
Steel hex screw	8	Steel	5
Contact guide support	2	Polyamide	18
Screw	8	Steel	1
Screw	8	Steel	1
Motor operator	1	Assembly	8402
Handle kit	1	See component list	690
Transmission shaft	1	Steel	20
Circlip	1	Steel	1

## Change-over switch OT2000–2500E\_C

Component name	Quantity	Material(s)	Weight (g/pc)
OT2000–2500E_C1	1	See component list	24910
OT2000–2500E_C2	1	See component list	24910
Joint	1	Steel	150
Interm protection R5	6-8	Polycarbonate	30
Cover mechanism R4	2	Polycarbonate	22

## Switch-disconnector OT2000–2500E\_C1

Component name	Quantity	Material(s)	Weight (g/pc)
Mechanism	1	See component list	2075
Pole	3-4	See component list	6667
Stud screw	2-4	Steel	52-170

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**Switch-disconnector OT2000-2500E\_C2**

<b>Component name</b>	<b>Quantity</b>	<b>Material(s)</b>	<b>Weight (g/pc)</b>
Mechanism	1	See component list	2076
Pole	3-4	See component list	6667
Stud screw	2-4	Steel	52-170

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**Handle kit**

<b>Component name</b>	<b>Quantity</b>	<b>Material(s)</b>	<b>Weight (g/pc)</b>
Cover	1	Polycarbonate	108
Guide	1	Polycarbonate	1
Lock	1	Polyamide	5
Compression spring	1	Steel	1
Screw	1	Steel	1
Bottom plate	1	Polycarbonate	25
Screw	4	Steel	1
Mechanism for micros	1	Polycarbonate	5
Insulator	1	Polycarbonate	1
Electric harness	1	Assembly	1
Handle	1	Assembly	500

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**Handle**

<b>Component name</b>	<b>Quantity</b>	<b>Material(s)</b>	<b>Weight (g/pc)</b>
Handle	1	Polyamide	
Compression spring	1	Steel	1
Locking pin	1	Zinc	1
Lock plunger	1	Polycarbonate	12
Slotted plug	1	Chromium steel	1
Shaft	1	Steel	100
Screw	6	Steel	1

—  
**Pole**

<b>Component name</b>	<b>Quantity/pole</b>	<b>Material(s)</b>	<b>Weight (g/pc)</b>
Frame A	1	Polyest-resin	895
Frame B	1	Polyest-resin	991
Contact knife	6	Copper	54
Contact iron	4	Steel	26
Contact spring	3	Chromium steel	6
Plug	1	Chromium steel	12
Plug	3	Chromium steel	4
Roll	1	Polyarylamide	452
Arc plate	7	Steel	43
Fixed contact	1	Copper	1404
Window	1	Polycarbonate	26
Cover	1	Polycarbonate	66
Screw	1	Steel	9
Dome headed steel rivet	3	Steel	9

—  
**Mechanism**

<b>Component name</b>	<b>Quantity</b>	<b>Material(s)</b>	<b>Weight (g/pc)</b>
Frame	1	Polyamide	487
Frame	1	Polyamide	207
Cover	1	Polycarbonate	61
Pipeshaft	1	Zinc alloy	235
Lever	1	Zinc alloy	315
Lever	1	Zinc alloy	365
Spring	2	Steel	169
Rhythm spring	1	Steel	39
Steel hex nut	4	Steel	5
Screw	4	Chromium steel	2

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## Recycling information in accordance with the WEEE

The product is marked with the wheelie bin symbol. It indicates that at the end of life the product should enter the recycling system.

You should dispose of it separately at an appropriate collection point and not place it in the normal waste stream.

The figure below shows the wheelie bin symbol indicating separate collection for electrical and electronic equipment (EEE).



The horizontal bar underneath the crossed-out wheelie bin indicates that the equipment has been manufactured after the Directive came into force in 2005.

The wheelie bin symbol is added to the type designation label of the product since 2017.



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