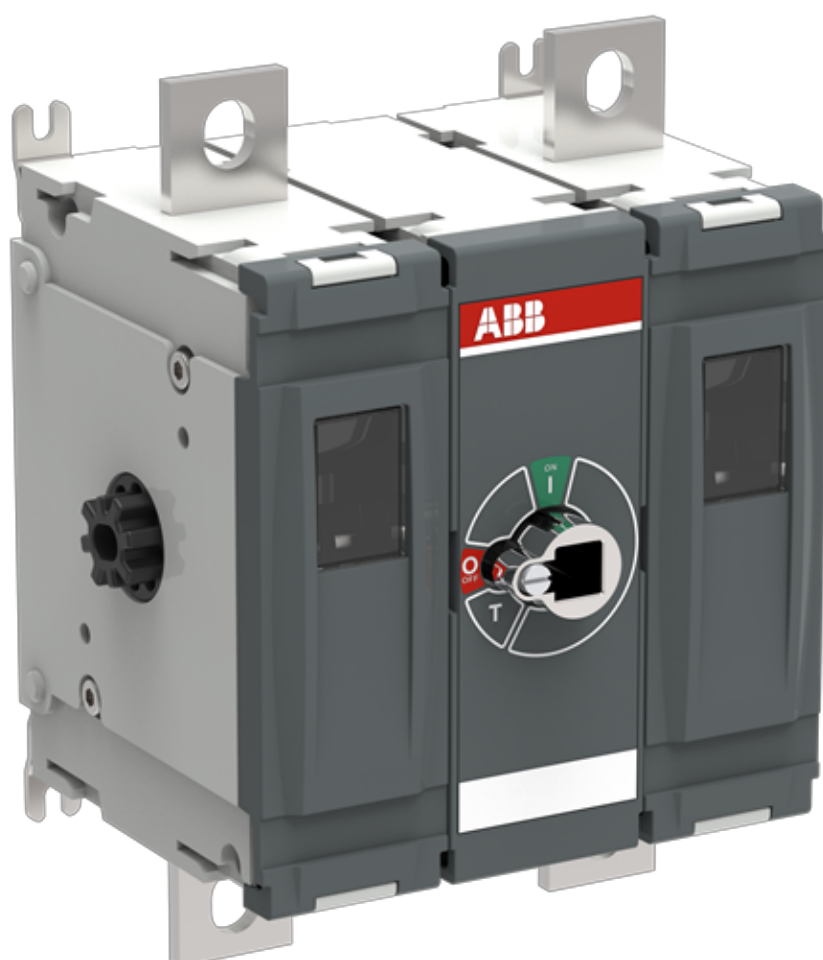

INSTRUCTION HANDBOOK

OTDC M-Series 250...1000A

Disassembling instructions



1. SCOPE

Scope of this document is to illustrate the basic structure and disassembly of OTDC M-Series 250...1000A switch-disconnectors.

This document uses OTDC400FV11 2p version as a reference product, and it covers other versions of OTDC M-Series 250...1000A switch-disconnectors with few differences to be taken into account.

These differences include number of poles, pole configuration, side or front operation. Other differences between switch-disconnectors may result from accessories, including shafts, handles, phase barriers, shrouds, connection bars, auxiliary contacts, mechanical lugs and interlocks.

2. SAFETY NOTES

Before proceeding with any disassembling operation, it's mandatory to put the switch in open position.

Disassembling operations of 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 switch-disconnectors.

Disassembling activities must be performed in an ergonomic workspace able to ensure protection of persons demanded to perform disassembling activities.

Applicable national legislation and international standards in force at the time of disassembling of switch-disconnectors must be taken into account in addition to 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.

3. PERSONAL PROTECTIVE EQUIPMENT (PPE)

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



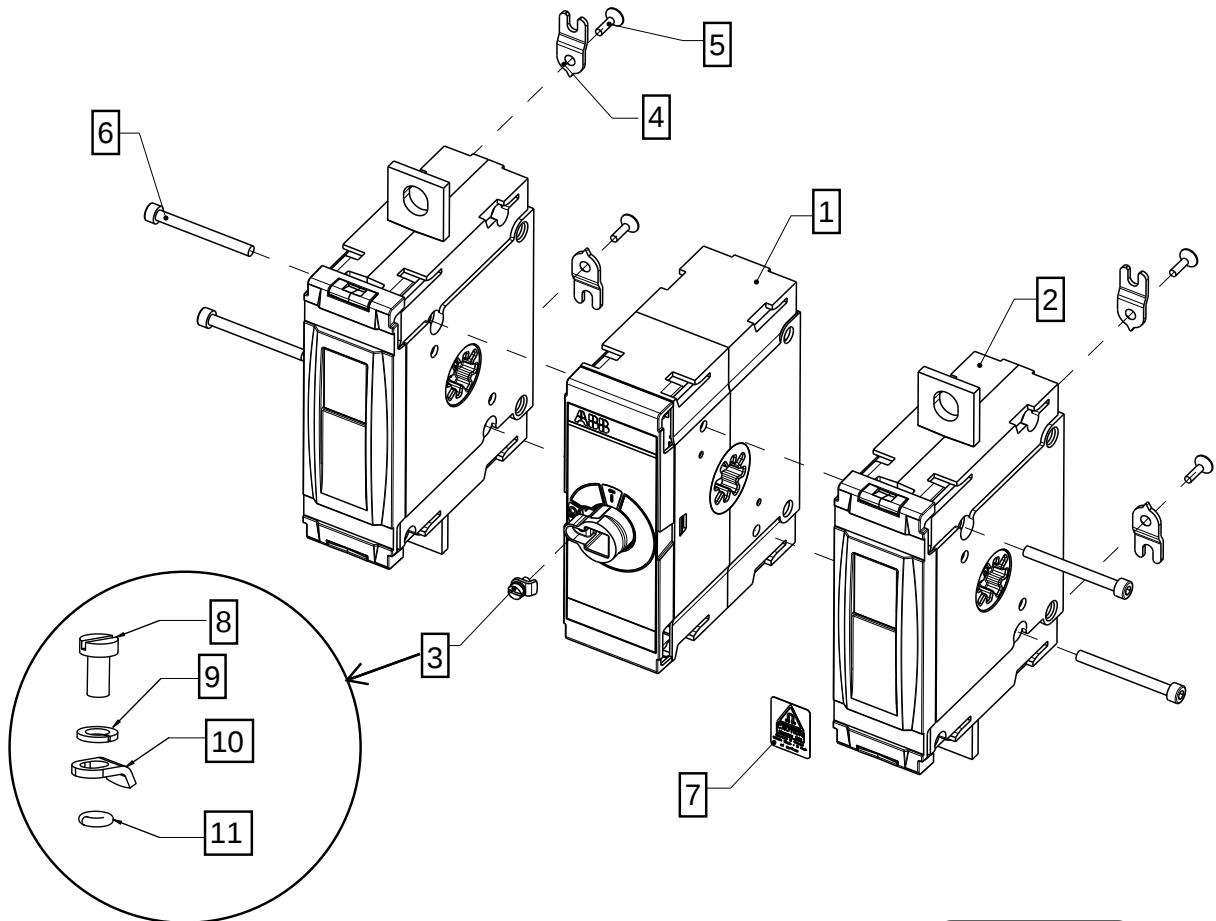
4. TOOLS

Disassembling operations require the use of tools (e.g. screwdriver, torx key, pliers, ...) tools to be used are specified inside each phase of the disassembling process.

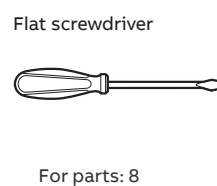
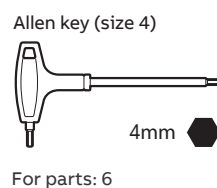
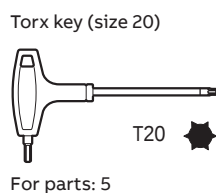
5. DISASSEMBLING PROCESS

Disassembly process is to be performed following the structure shown in drawings in this chapter. Each drawing shows the components, their weight, material and quantity.

5.1 Phase 1, Switch Assembly

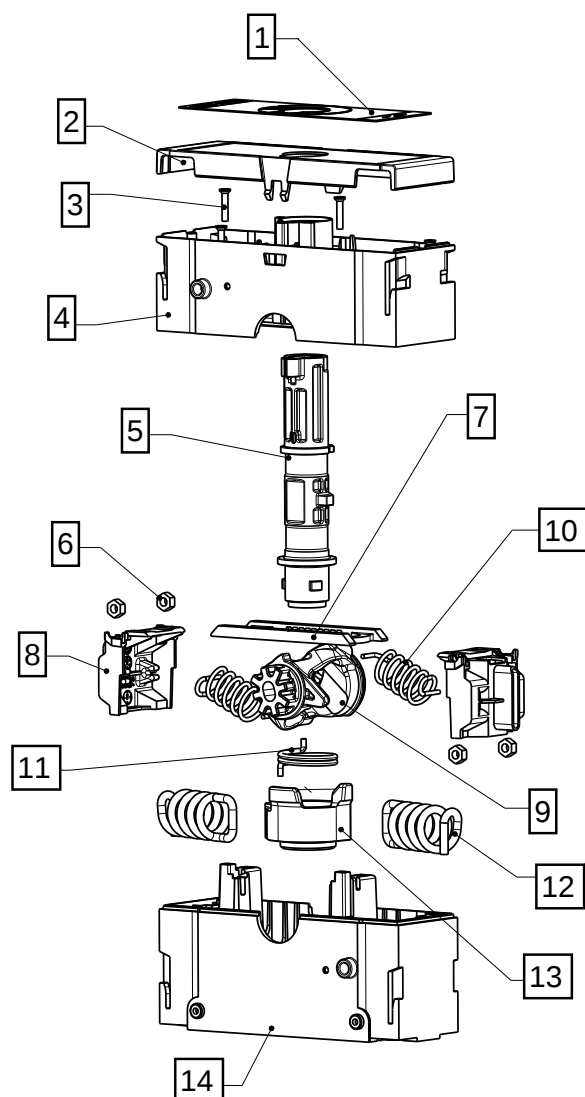


Tools:



Part no.	Name	Qty	Materials	Weight (g/pc)
1	Mechanism	1	(Assembly)	775,1
2	Pole	2-6	(Assembly)	1216,1
3	Shaft Locking	1	(Assembly)	1,8
4	Mounting Plate	4	Steel	5,1
5	Screw	4	Steel	1,6
6	Hexag. Socket Head Screw	4	Chromium Steel	15 - 27,9
7	Warning Plate	1	Polypropylene	0,1
8	Slot Screw	1	Chromium Steel	1,3
9	Spring Washer	1	Chromium Steel	0,2
10	Lock Spring	1	Steel	0,2
11	O-Ring	1	Rubber	0,01

5.2 Phase 2, Mechanism Assembly

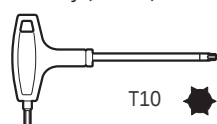


Note!

Pay special attention to tensioned springs. Use personal protective equipment.

Tools:

Torx key (size 10)



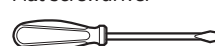
For parts: 3

Pliers



For parts: 10, 11, 12

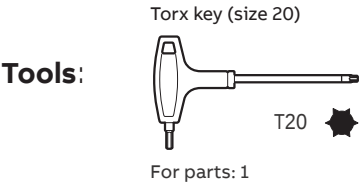
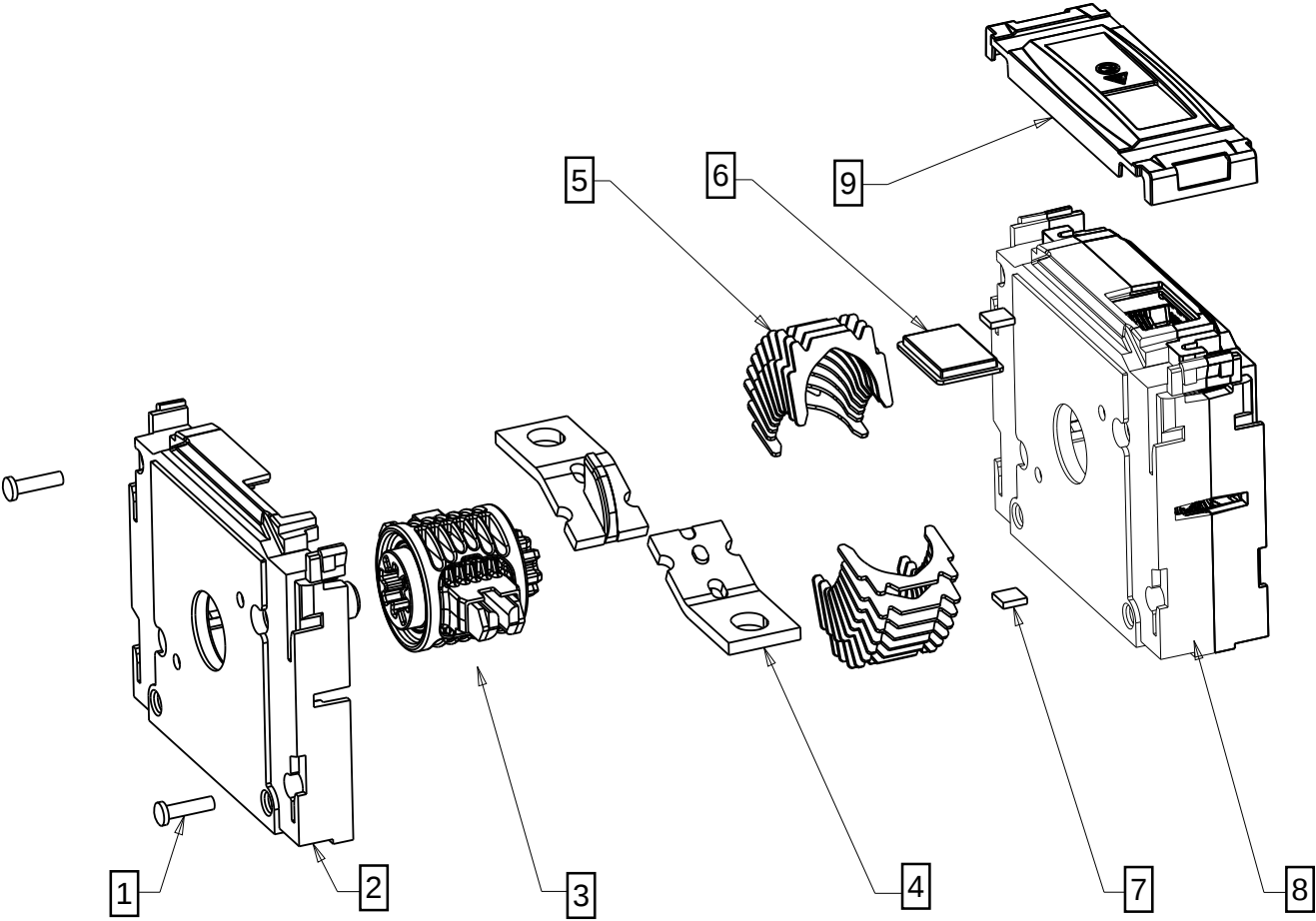
Flat screwdriver



For parts: 2

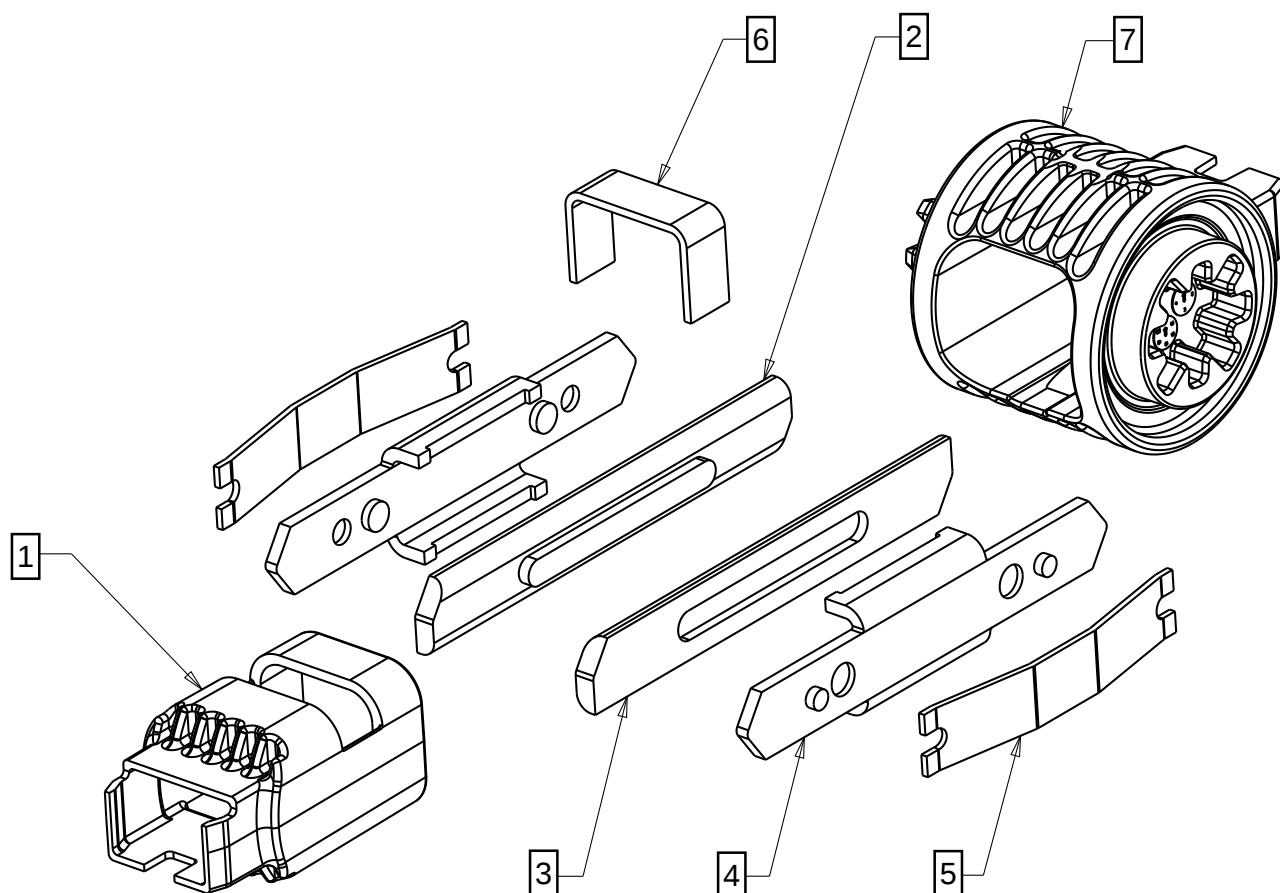
Part no.	Name	Qty	Materials	Weight (g/pc)
1	Cover Plate	1	Polyester	0,353
2	Cover	1	Polycarbonate	19,2
3	Screw	4	Chromium Steel	2
4	Frame	1	Polyamide	97,9
5	Pipeshaft	1	Zinc Die Casting Alloy	188,8
6	Steel Hex Nut	4	Chromium Steel	1,45
7	Contact Guide Support	1	Polyamide	6
8	Spring Support	2	Polyamide	10,3
9	Lever	1	Zinc Die Casting Alloy	93
10	Spring	2	Chromium Steel	1
11	Rhythm Spring	1	Chromium Steel	7,82
12	Spring	2	Steel	4,3
13	Lever	1	Zinc Die Casting Alloy	131,5
14	Frame	1	Polyamide	164

5.3 Phase 3, Pole Assembly



Part no.	Name	Qty	Materials	Weight (g/pc)
1	Screw	2	Steel	2,3
2	Frame A	1	Polyester	298,6
3	Contact Construction	1	(Assembly)	413,3
4	Fixed Contact	2	Copper	407,2
5	Arc Plate	20	Steel	6,1
6	Window	1	Polycarbonate	2,5
7	Magnet	2	Neodym Iron Boron	1,8
8	Frame B	1	Polyester	360,2
9	Cover	1	Polycarbonate	14,3

5.4 Phase 4, Contact Construction Assembly



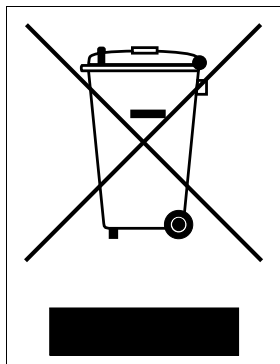
Part no.	Name	Qty	Materials	Weight (g/pc)
1	Locking Piece	1	Polyamide	8,9
2	Contact Knife	1	Copper	39,5
3	Contact Knife	1	Copper	39,5
4	Contact Iron	2	Steel	33,5
5	Contact Spring	2	Steel	7,2
6	Spring Guide	1	Steel	6,7
7	Roll	1	Polyamide	30,6

6. 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.

The figure below shows an example.



Contact us

ABB Oy

P.O. Box 622
FI-65101 Vaasa
Finland

abb.com/lowvoltage