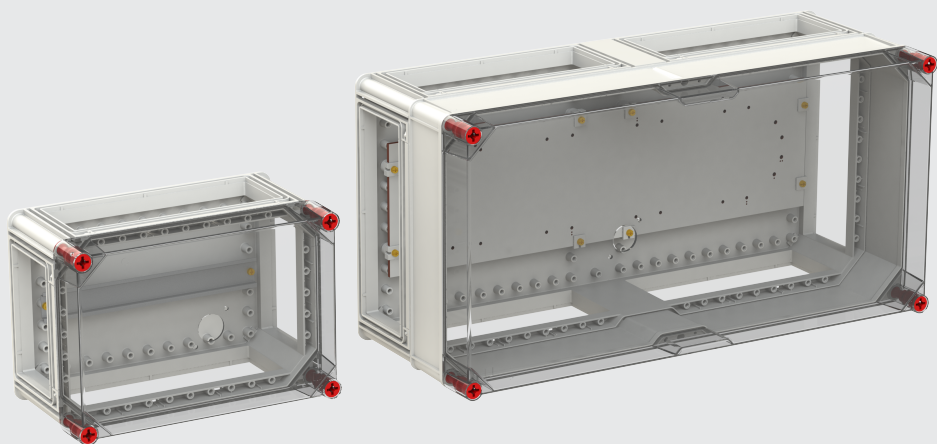


PRODUCT MANUAL

VMS - LV modular system

COS



Contents

- 1 Icons..... 3
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 - 3.2 Mounting indications for terminals..... 6
- 4 Network types..... 7
- 5 Assembly steps..... 8

Additional drawings and instructions can be found in the ABB Library:

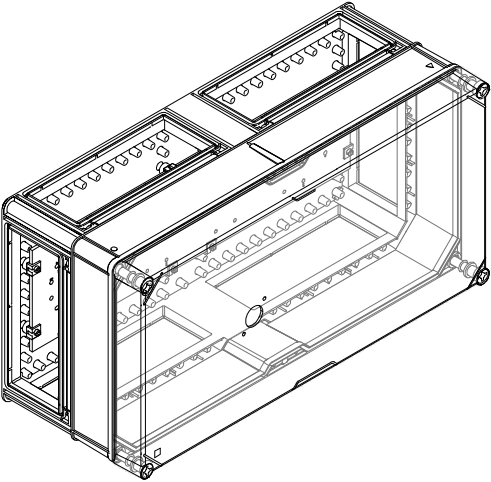
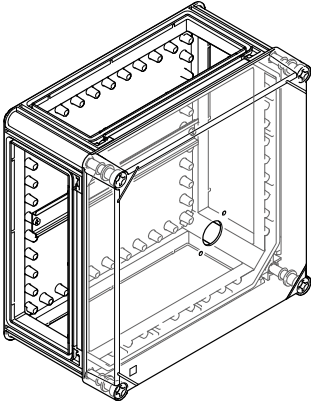


1 Icons

Icon	Description
	Warning / Caution
	Note
	Material - included
	Material - not included
	Tools
	Tightening torque (Nm)

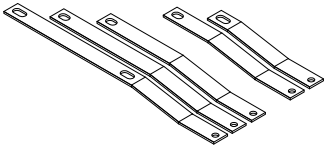
2 Material

2.1 Material - included

Box with mounting plate	SKU-codes	Description
	4TBV853429C0100	VMS 63H for - OS 100-160 COS - OT 160-250 COS
Box with DIN-rail		
	4TBV853425C0100 4TBV853426C0100	VMS 32H for - OT16F-OT125F COS VMS 33 for - OT16F-OT125F COS

2.2 Material - not included

2.2.1 CU strip sets

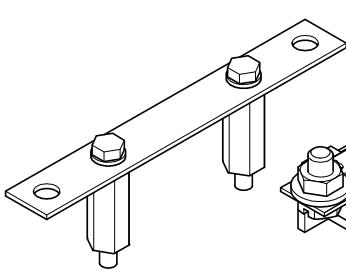


Device/VMS BOX	PHASE1-3 (2x)	N 4th POLE (TOP)	N 4th POLE (BOT)	PE TOP/N BOT/PEN	N TOP/PE BOT
OS160 VMS63H	4TBV853849C0100*	4TBV854252C0100	4TBV854209C0100	4TBV853806C0100	4TBV853807C0100
OT160 VMS63H	4TBV854155C0100	N.A.	N.A.	4TBV853806C0100	4TBV853807C0100
OT200-250 VMS63H	4TBV854156C0100	N.A.	N.A.	4TBV853815C0100	4TBV853816C0100
* This set includes only 3 pieces. For complete installation order this set twice.					

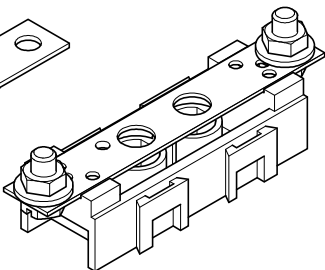


Hardware for mounting the switches is not included!

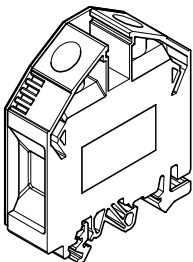
2.2.2 Terminals



Custom terminal



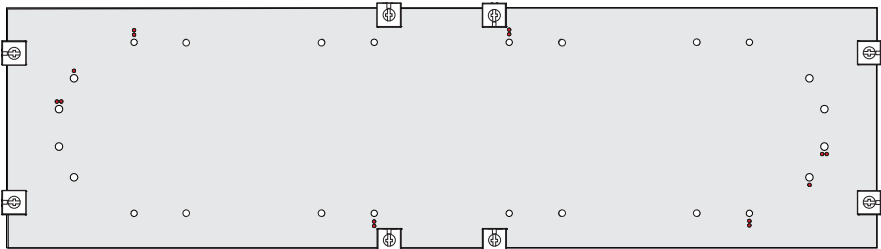
Standard terminals



DIN rail Standard terminal

Device	Terminal SKU	Terminal Description
OS100-160	4TBV853681C0100	Custom terminal 160A
OT16-40	N.A.	DIN rail Standard terminal 40A
OT63-80	N.A.	DIN rail Standard terminal 80A
OT100-125	N.A.	DIN rail Standard terminal 125A
OT160	4TBV853681C0100	Custom terminal 160A
OT200-250	4TBV853682C0100	Custom terminal 250A

3 Mounting indications



The indicators 1 or 2 red dots show at which hole in the upper left corner you need to start mounting.

- Vertical dots: switch mounting.
- Horizontal dots: terminal mounting.

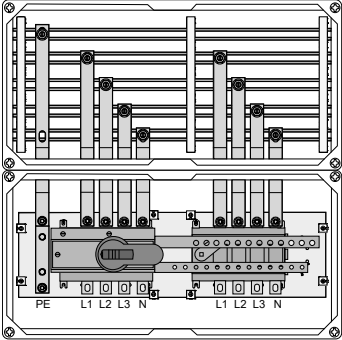
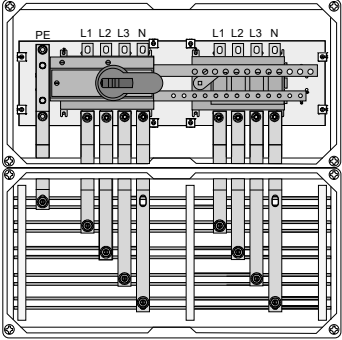
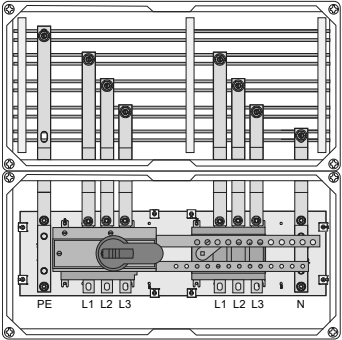
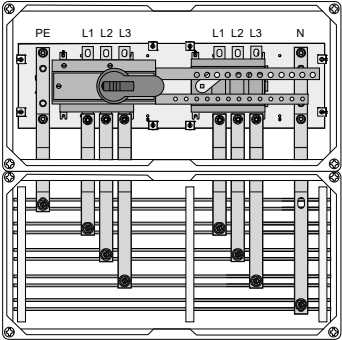
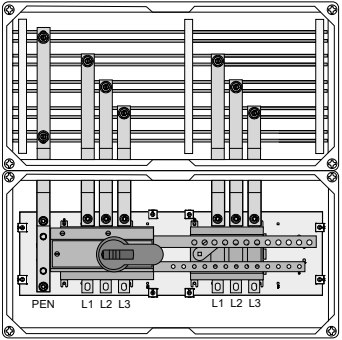
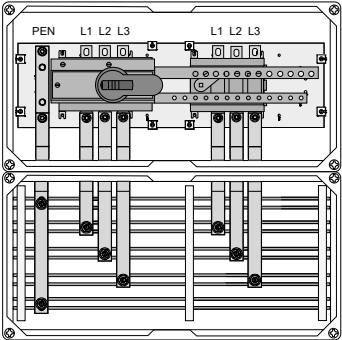
3.1 Mounting indications for switches

Description	
A top-down view of a rectangular mounting plate with two switch modules mounted side-by-side. Each module has four terminal blocks. Two red dots in the upper-left corner indicate the starting point for switch mounting. The diagram also shows various other mounting holes and symbols around the perimeter.	OS100-160 03 OT160-250 03 & 04

3.2 Mounting indications for terminals

Description		
A top-down view of a rectangular mounting plate with terminal blocks mounted on the left side. A single red dot in the upper-left corner indicates the starting point for terminal mounting. The diagram shows various other mounting holes and symbols.	Cust.TML 160A Cust.TML 250A	
A top-down view of a rectangular mounting plate with terminal blocks mounted on the left side. Two red dots in the upper-left corner indicate the starting point for terminal mounting. The diagram shows various other mounting holes and symbols.		Std.TML 160A Std.TML 250A

4 Network types

	Top configuration	Bottom configuration
TNS 4 pole		
TNS 3 pole		
TNC		



The copper strips version is shown here. This configuration also applies to a wired configuration.

5 Assembly steps

1. Material: overview



1 VMS base with mounting plate

2 Extension frame

3 Extension frame side screws (2x)

4 Extension frame screws (4x)

5 Cover

6 Cover screws (4x)



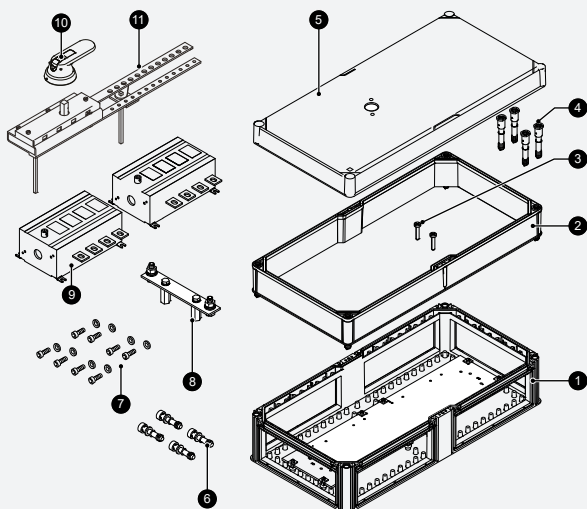
7 Switch screws (4x) and washers (4x)

8 N/PE terminals

9 Switches

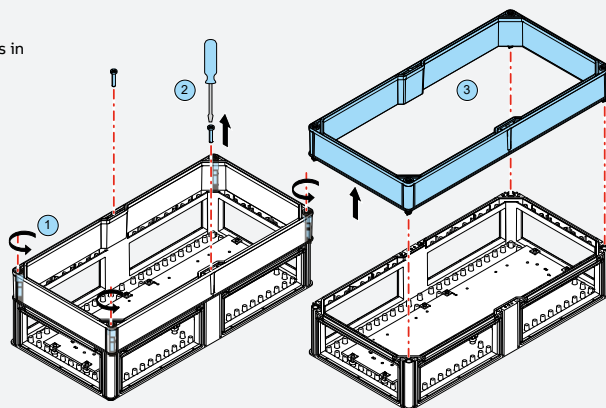
10 Handle

11 COS handle shaft



2. Removing the extension frame

Remove, besides the four cover screws, also the 2 metallic screws in the middle of the long sides.



3. Mounting the switch: on a mounting plate (A) or on a DIN rail (B)



1 Switches

2 Screw + washer (4x)

OS100-160: M5x10

OT160-250: M5x10

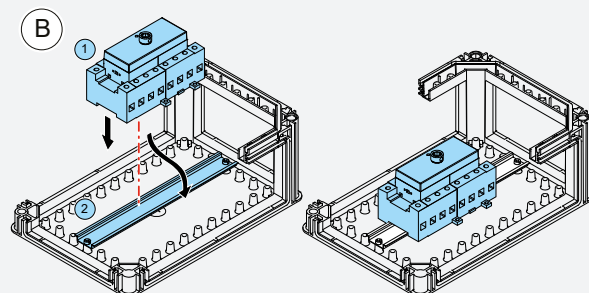
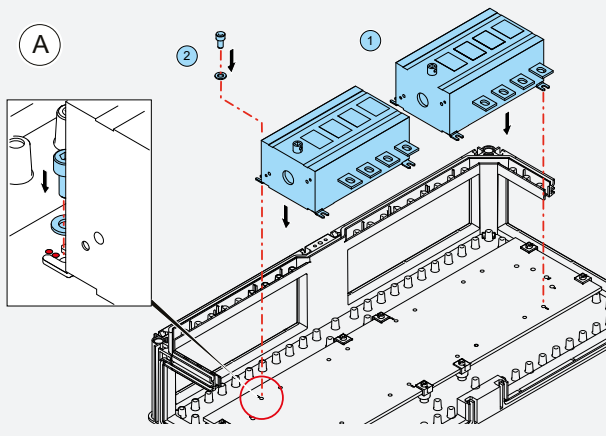


M5 1.5 Nm



1 Switches with COS-mechanism

2 DIN rail



4. Mounting a terminal: overview



1 Hex bolt (2x)

2 Washer (2x)

3 Terminal strip (1x)

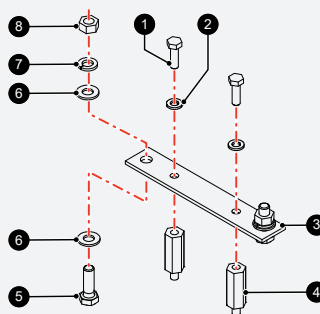
4 Terminal spacer (2x)

5 Hex bolt (2x)

6 Washer (4x)

7 Spring washer (2x)

8 Hex nut (2x)



5. Mounting a terminal: on a mounting plate (A) or on a DIN rail (B)

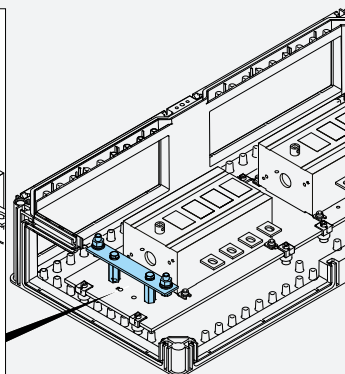
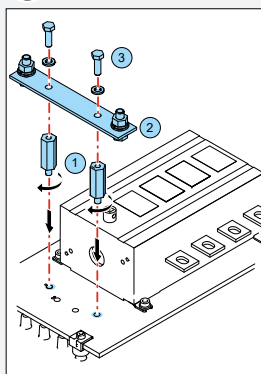


- 1 Terminal spacers (2x)
- 2 Terminal strip
- 3 Terminal bolts + washer (2x)



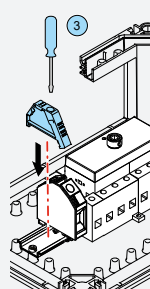
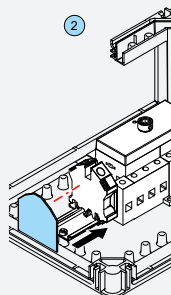
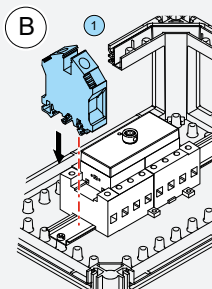
- 1 4 Nm
- 3 6 Nm

A



- 1 DIN rail PE/N/PEN terminal
- 2 Terminal end plate
- 3 End clamp

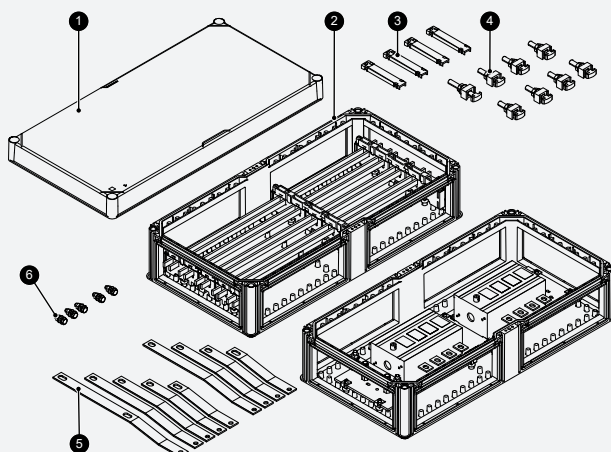
B



6. Installing the busbar box: overview



- 1 Busbar box cover
- 2 Busbar box
- 3 Coupling dowels (4x)
- 4 Anchor bolts
- 5 Copper strips
- 6 Copper strips screws (5x)



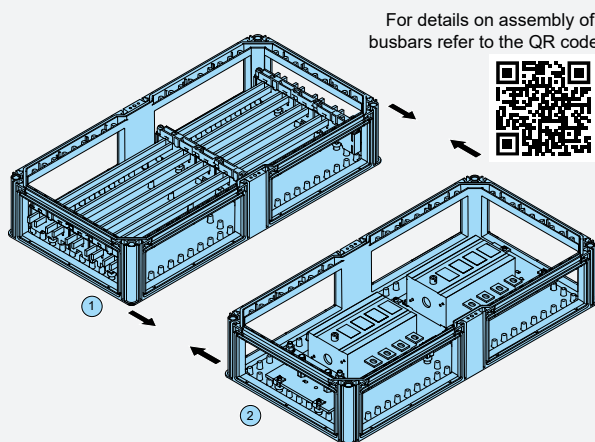
7. Installing the busbar box (A): connecting the boxes



- 1 Busbar box



- 2 OT/OS device box



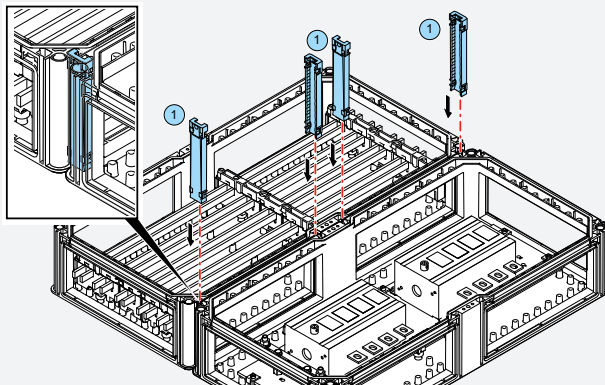
For details on assembly of busbars refer to the QR code



8. Installing the busbar box (B): inserting the coupling dowels



- 1 Coupling dowels (4x)



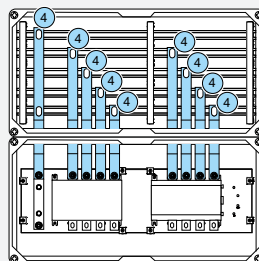
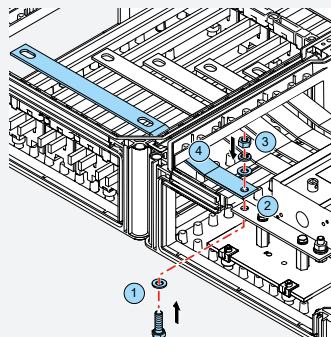
9. Mounting the copper strips



- 1 Hex bolt and washer
2 Terminal
3 Hex nut / spring washer / washer
4 Copper strips



- M8 15-22 Nm
M10 30-44 Nm
M12 50-75 Nm



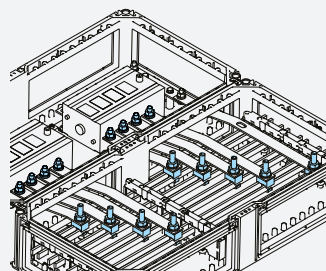
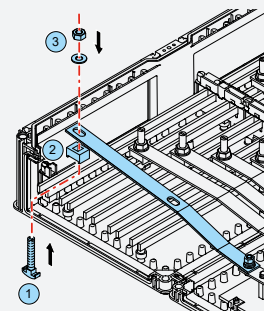
10. Mounting the anchor bolts



- 1 Anchor bolt
2 Connecting block
3 Nut / washer



- M10 30-44 Nm



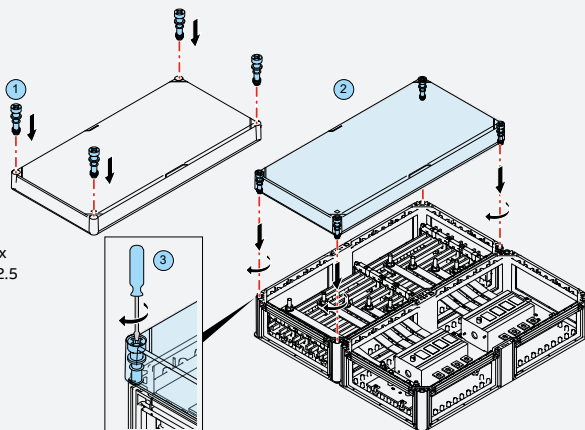
11. Fastening the busbar cover



- 1 Cover screws (4x)
- 2 Busbar box cover

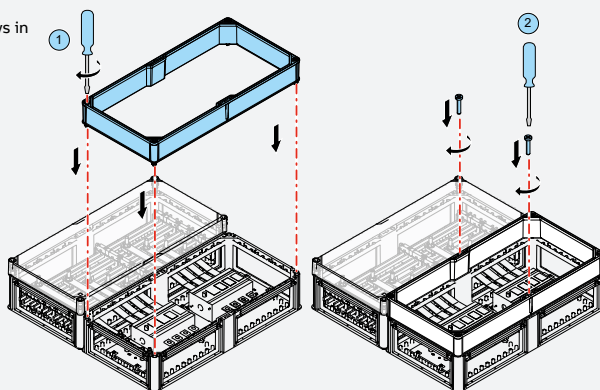
For fastening (busbar) box cover:

- a. Snap the cover screws in the four corner holes. The cover screws will be captive.
- b. Fit the cover on the correct box (one turn on the screws, max. 2.5 Nm).
- c. If necessary, stick the double isolation symbol on the cover.



12. Fastening the extension frame

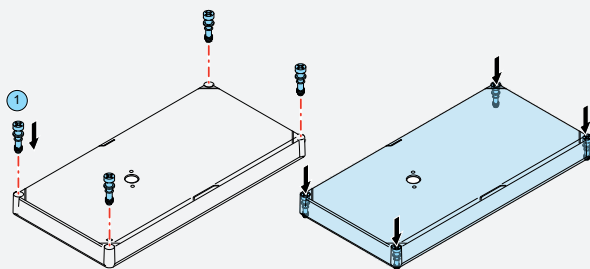
Fix also again the 2 metallic screws in the middle of the long sides.



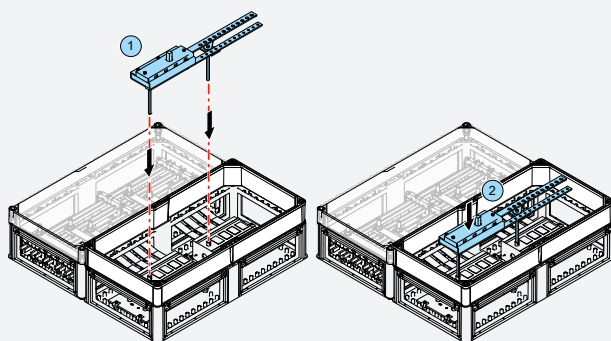
13. Inserting the VMS box cover screws



1 Cover screws (4x)



14. Mounting the handle: placing the shaft



15. Mounting the handle: measuring correct shaft length (A = mounting plate, B = DIN rail)



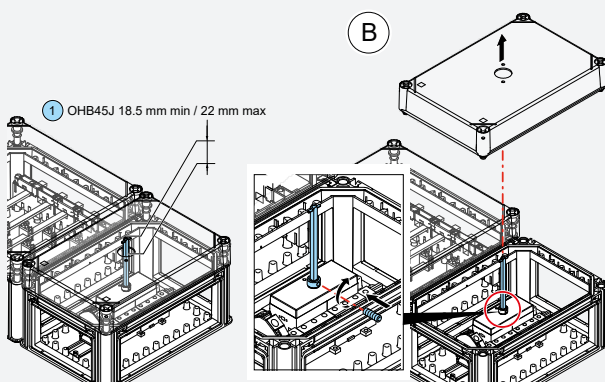
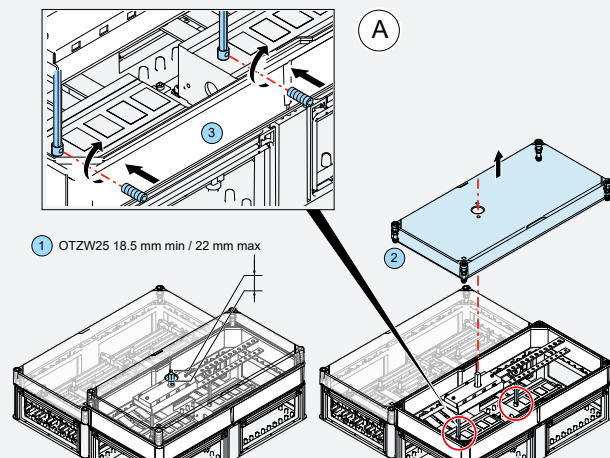
Make sure the cover is **firmly tightened** before measuring the shaft length.



For more information please refer to the device user manual.



OT16-125	0.8 Nm
OT160-250	1.8-2.0 Nm
OS100-160	1.8-2.0 Nm



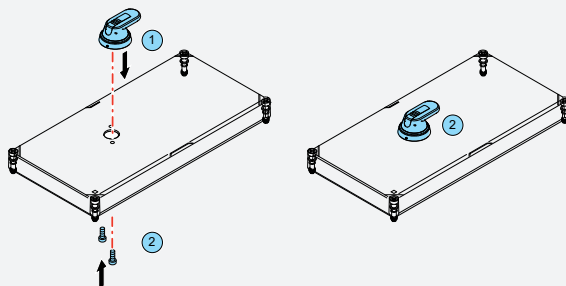
16. Mounting the handle: fastening the handle to the box cover



- 1 Handle
- 2 Handle screws (2x)



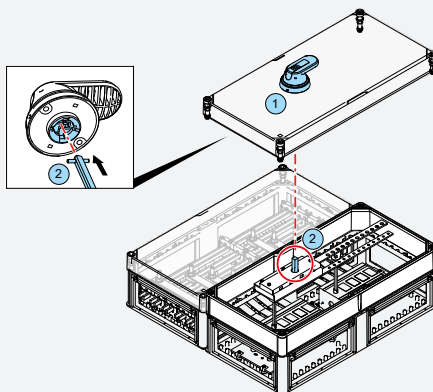
1.5 Nm



17. Mounting the handle: mounting the cover and handle



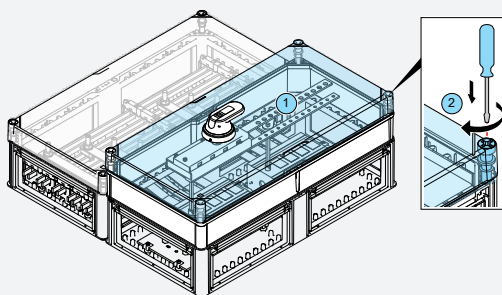
- 1 Handle
- 2 Shaft



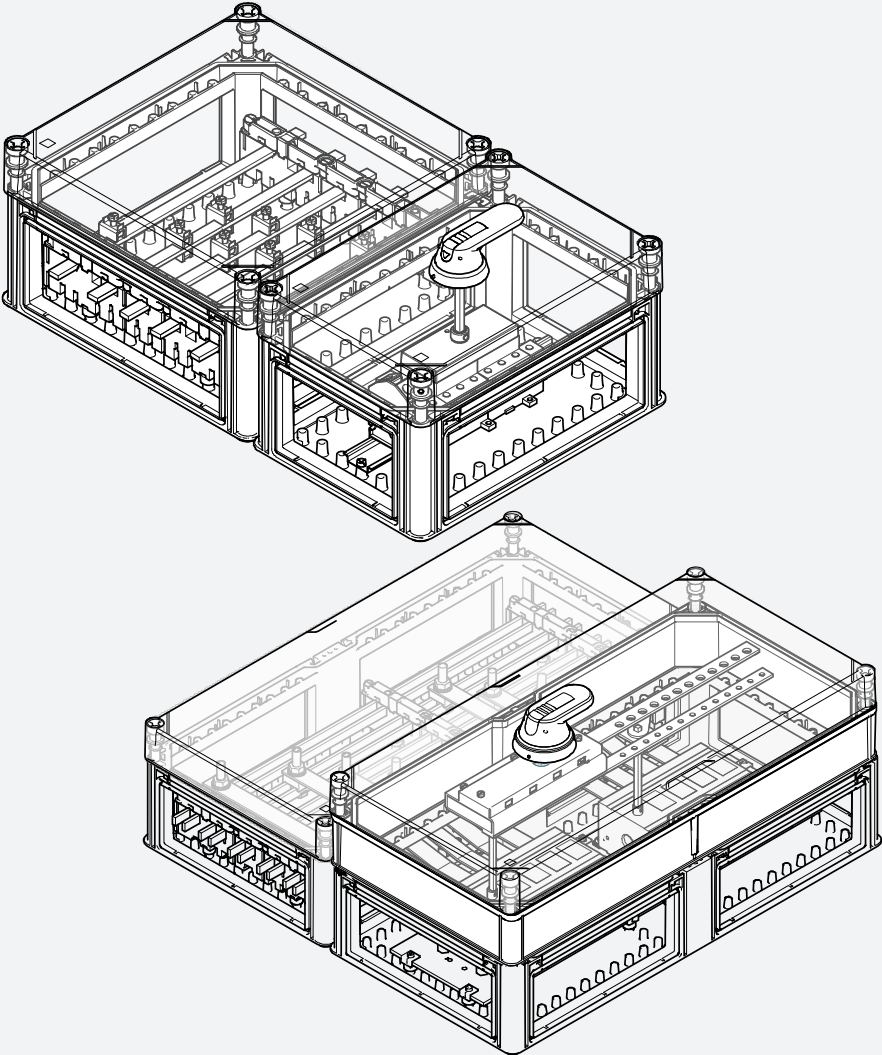
18. Mounting the handle: fastening the VMS box cover



- 1 Box cover
- 2 Cover screws



19. Installation complete



Notes:

[illegible]

Notes:

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