

Mechanical interlock

User Manual

Please carefully read this Use Manual before installing and use this product, and keep this Manual for further reference.

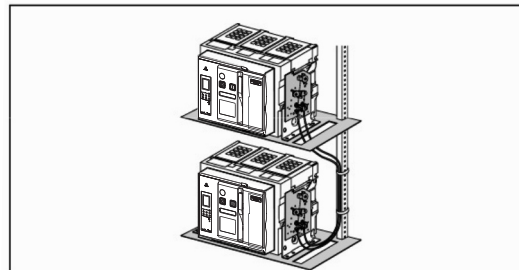


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- 2 2 Rope interlocking HDW3-4000H three-unit interlock.....12-16
- 3 3 Rod interlock.....17-26
- 4 4 The recommended holes size on baseplates.....27-28

Installation Manual for HDW3 Rope Interlock

Rope Interlock Installation Guide



Warning

This equipment is only installed by the professional plant. The manufacturer will not bear any consequence caused by failure to follow the installation guide specified in this manual!

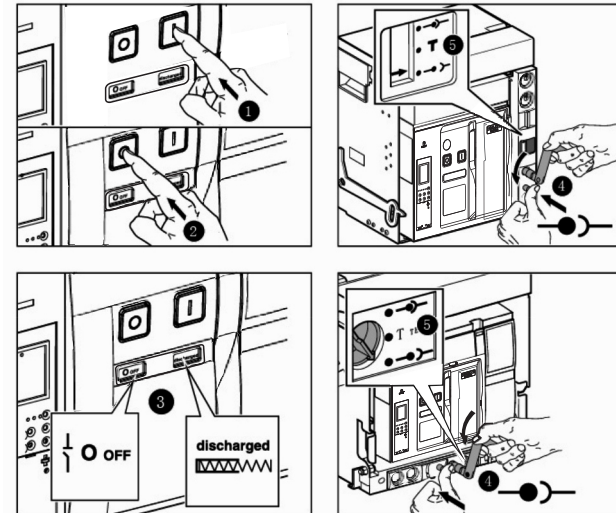
Be careful to prevent electric shock, burns or explosion

- This equipment is only installed by the professionals
- Cut off the main and auxiliary power supplies before inspection
- Determine the voltage with the appropriate voltage measurement device
- Restore all interlocks, doors and panels before storing energy

Failure to the above regulations may result in damage to the equipment, personnel injury or death

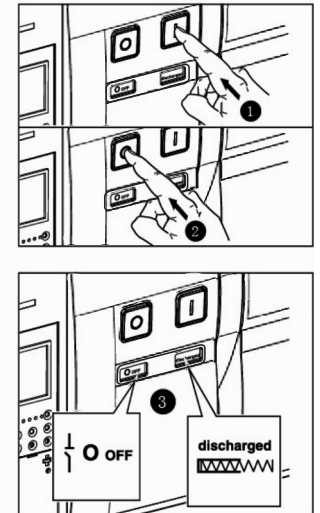
Preparation

Drawer breaker



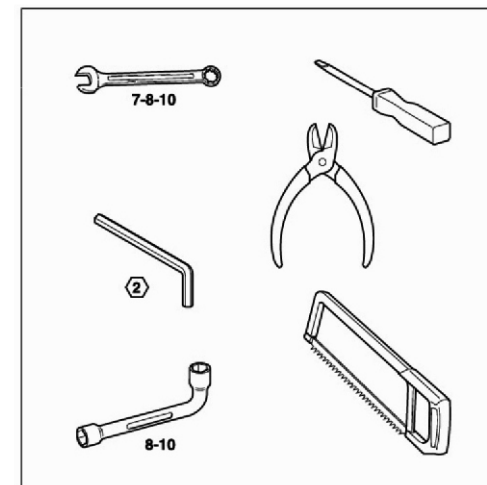
Drawer type: ① Press the ON button ② Press the OFF button ③ Confirm the switch in OFF position
④ Swing the body out counterclockwise ⑤ Make the three-position indicator at the separation position

Fixed breaker



Fixed type: ① Press the ON button ② Press the OFF button ③ Confirm the switch in OFF position

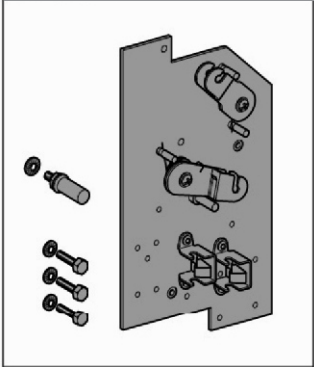
Necessary tools



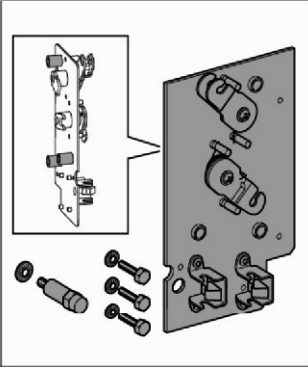
- Hex wrench
- Screwdriver
- Combination wrench
- Hexagon socket wrench
- Diagonal pliers
- Hacksaw

Unpack

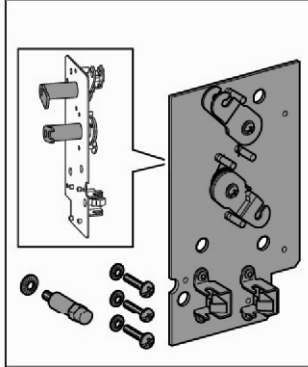
HDW3-4000
Fixed and drawer breaker



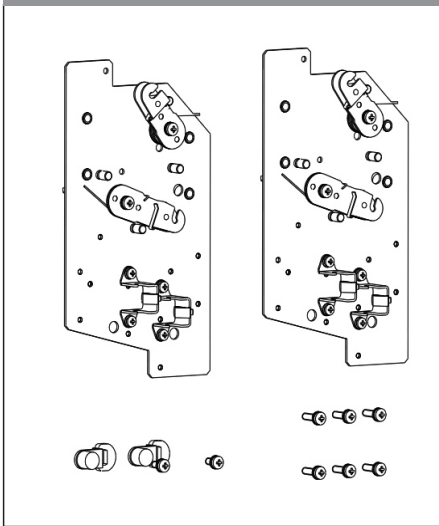
HDW3-1600
Fixed breaker



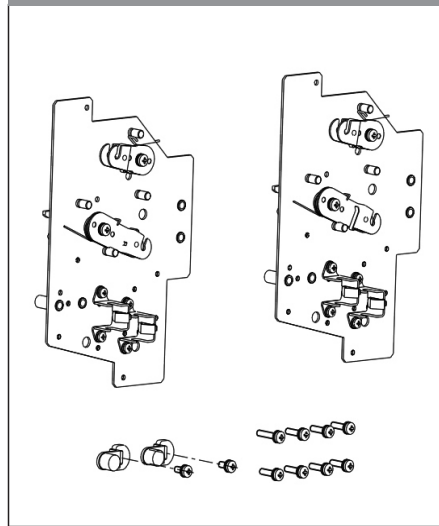
HDW3-1600
Drawer breaker



HDW3-2000/3200/6300
Drawer breaker

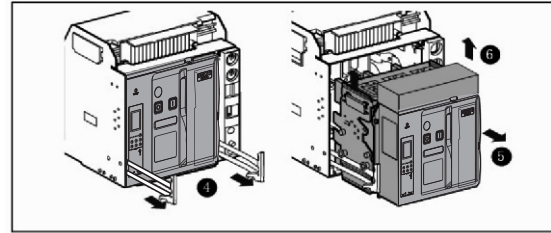
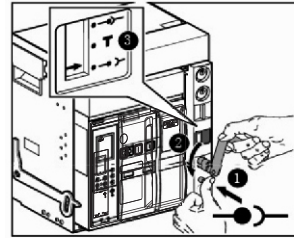


HDW3-2000/3200/6300
Fixed breaker

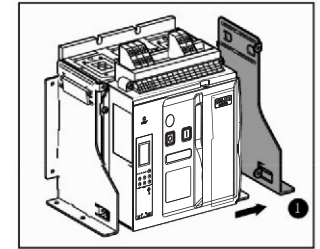


Install the HDW3-1600 two-unit rope interlock

Drawer breaker



Fixed breaker



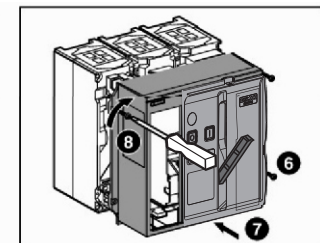
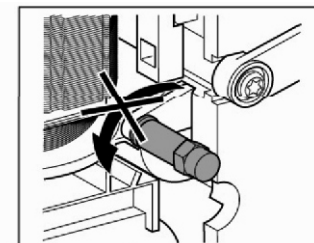
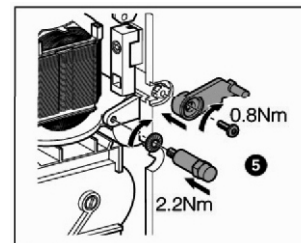
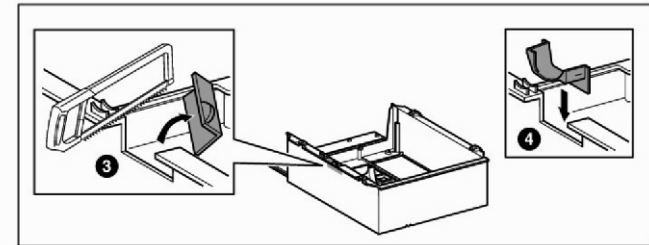
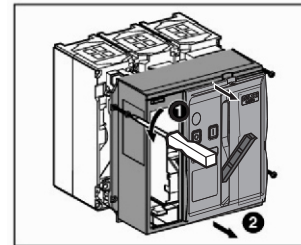
Fixed type: Remove the right side plate of the circuit breaker

Drawer type: 1 2 3 Swing the breaker body out of the drawer seat as shown in figure

4 Pull the drawer rod out of the drawer seat

5 6 Lift the body from the drawer seat

Install the HDW3-1600 two-unit ropers interlock



1 2 Unscrew the cover screw and remove the cover

3 Cut the knock block on the cover with a hacksaw as shown in figure

4 Insert the seal block at the specified position shown in figure

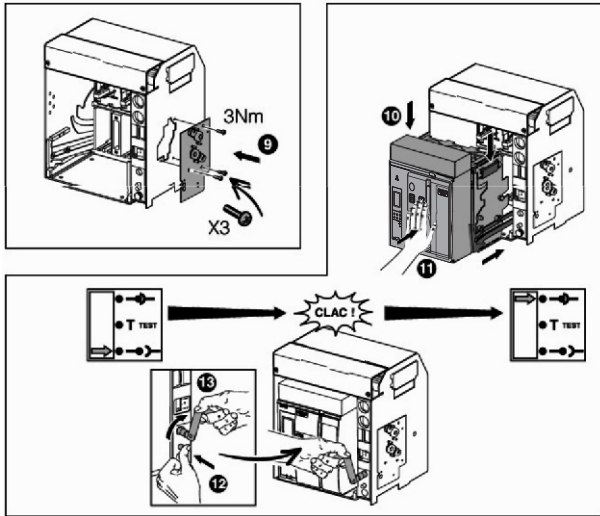
5 Install the interlock guide rod at the specified position shown in figure

6 Pull the handle out of the cover

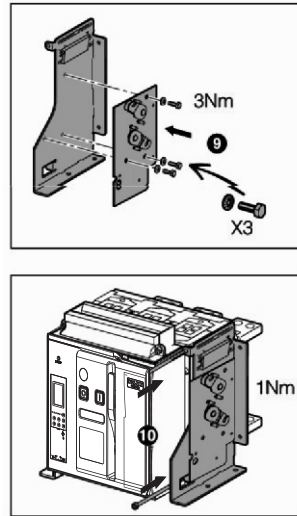
7 8 Install the cover and tighten the screws

Install the HDW3-1600N two-unit rope interlock

Drawer breaker



Fixed breaker

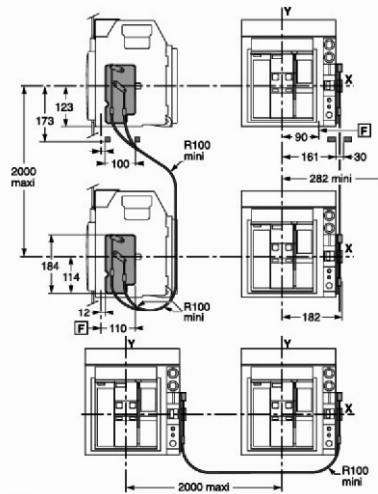


Drawer type: **9** Install the mechanical interlock plate at the specified position shown in figure
10 11 Place the breaker on the guide rod of the drawer seat and push in the drawer seat
12 13 Swing the body in the drawer seat and confirm that the body is at the "Connect" position

Fixed type: **9** install the interlock plate at the right side plate
10 Install the right side plate at the breaker body

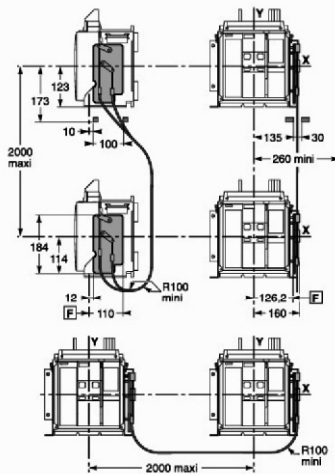
Install the HDW3-1600 two-unit rope interlock

Drawer breaker



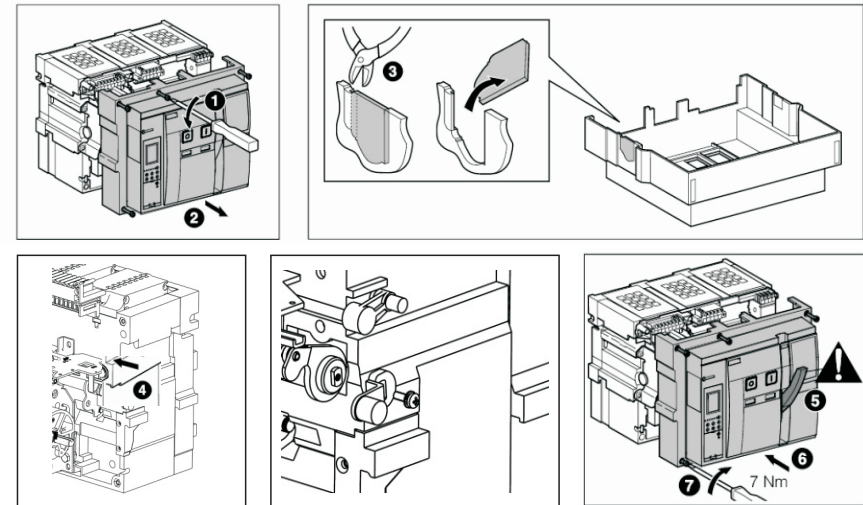
F Datum point maxi: Max. mini: Min.

Fixed breaker



F Datum point maxi: Max. mini: Min.

Install the HDW3-2000/3200/6300 two-unit rope interlock



1 2 Unscrew the cover screw and remove the cover

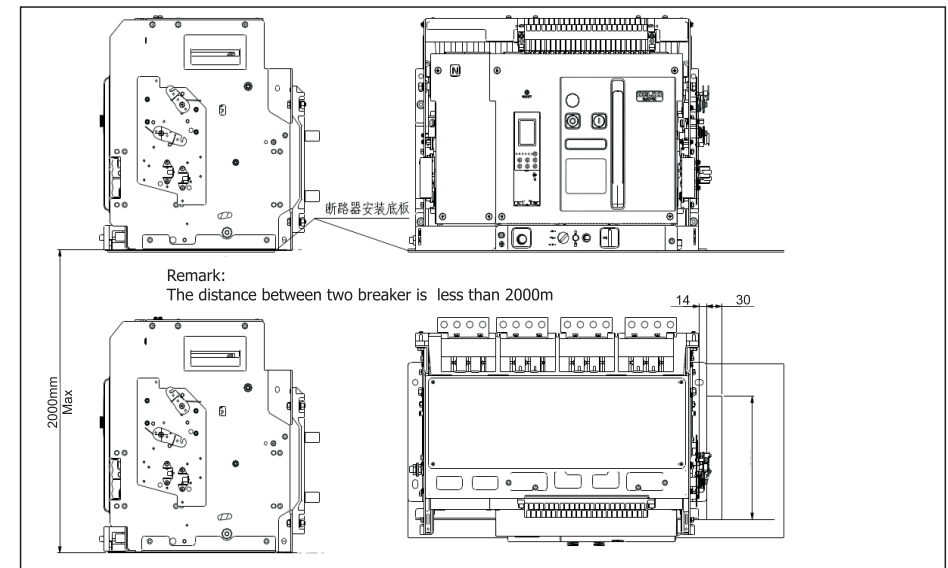
3 Cut the knock block on the cover with a hacksaw as shown in figure

4 Insert the seal block at the specified position shown in figure

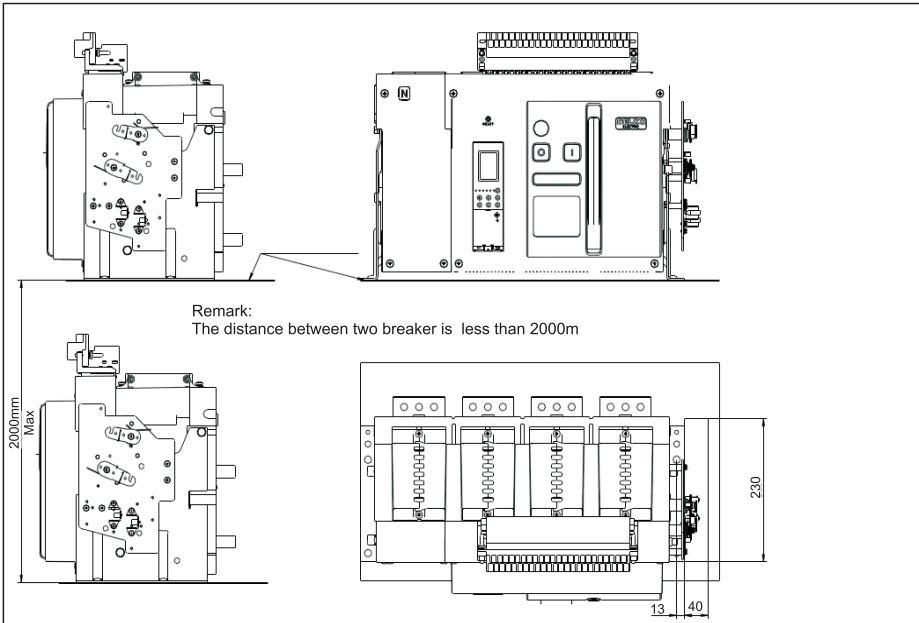
5 Install the interlock guide rod at the specified position shown in figure
6 7 Pull the handle out of the cover
 Install the cover and tighten the screws

Install the HDW3-2000/3200/6300 two-unit rope interlock

Drawer breaker

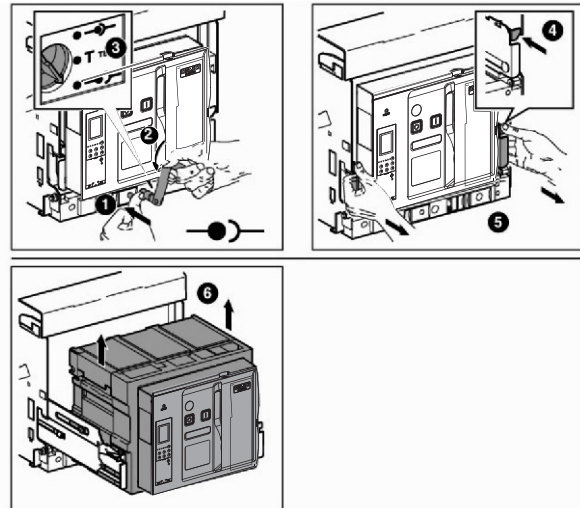


Fixed breaker



Install the HDW3-4000 two-unit rope interlock

Drawer breaker

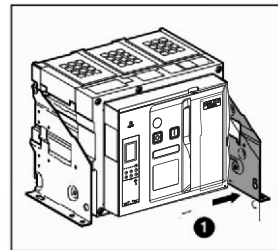


Drawer type: ① ② ③ Swing the breaker body out of the drawer seat and confirm the three-position indicator at the Separation position, as shown in figure

④ ⑤ Pull the breaker body out of the drawer seat as shown in figure

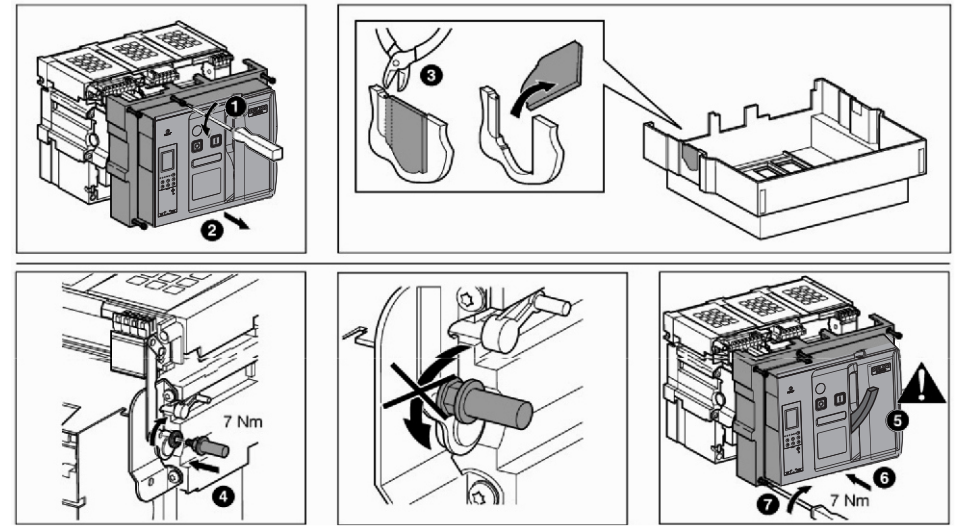
⑥ Lift the breaker body from the drawer seat

Fixed breaker



Fixed type: ① Remove the right side plate of the circuit breaker

Install the HDW3-4000 two-unit rope interlock



① ② Release the cover screws and remove the cover

③ Cut off the knock block on the cover with a diagonal pliers as shown in figure

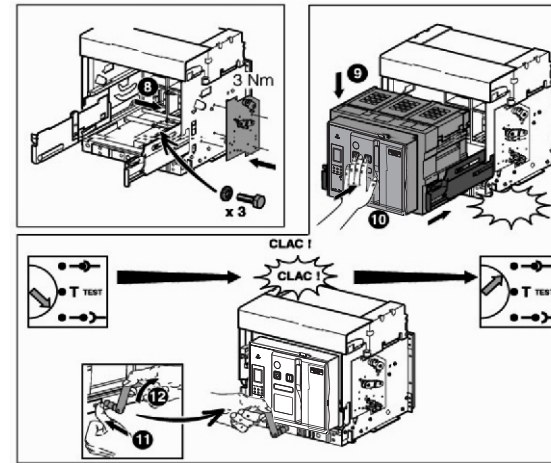
④ Install the interlock guide rod at the specified position shown in figure

⑤ Extend the handle out of the cover

⑥ ⑦ Install the cover and tighten the screws

Install the HDW3-4000 two-unit rope interlock

Drawer breaker

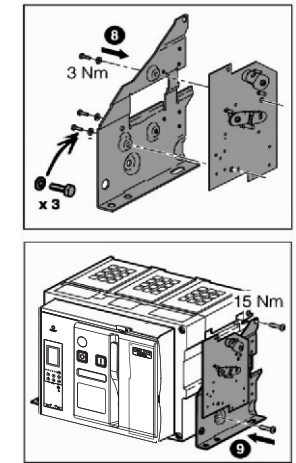


Drawer type: ⑧ Install the mechanical interlock plate at the specified position shown in figure

⑨ ⑩ Place the breaker on the guide rod of the drawer seat and push in the drawer seat

⑪ ⑫ Swing the body in the drawer seat and confirm that the body is at the "Connect" position

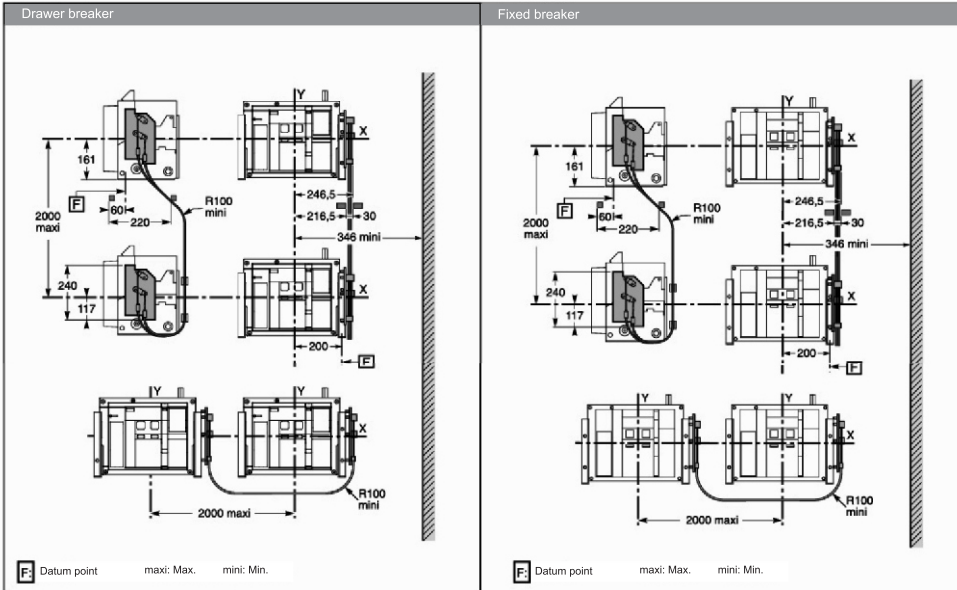
Fixed breaker



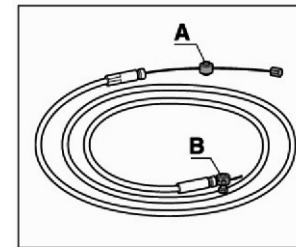
Fixed type: ⑧ Install and fix the interlock plate on the right side plate

⑨ Install and fix the right side plate on the breaker body

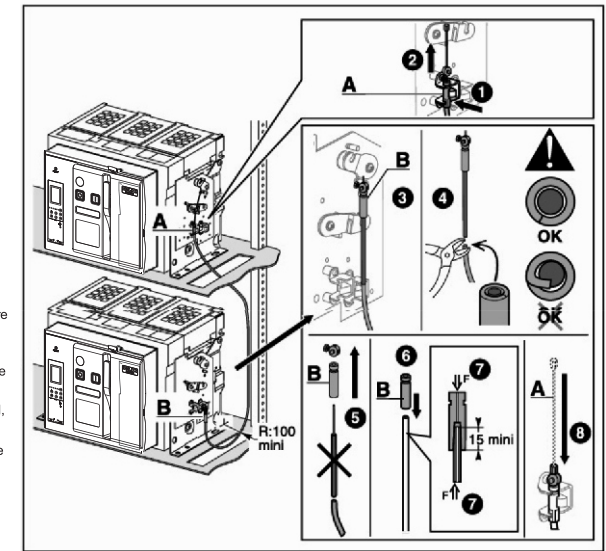
Install the HDW3-4000 two-unit rope interlock



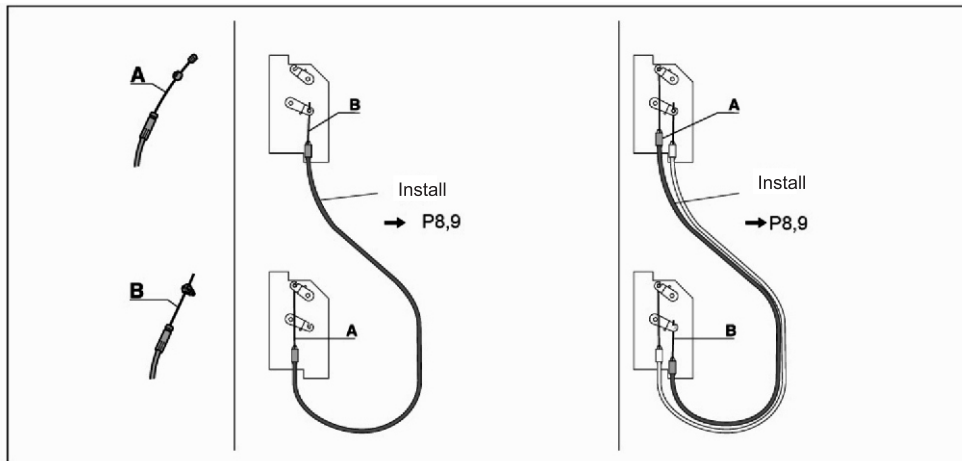
Install the HDW3-1600/2000/3200/4000/6300 two-unit rope interlock



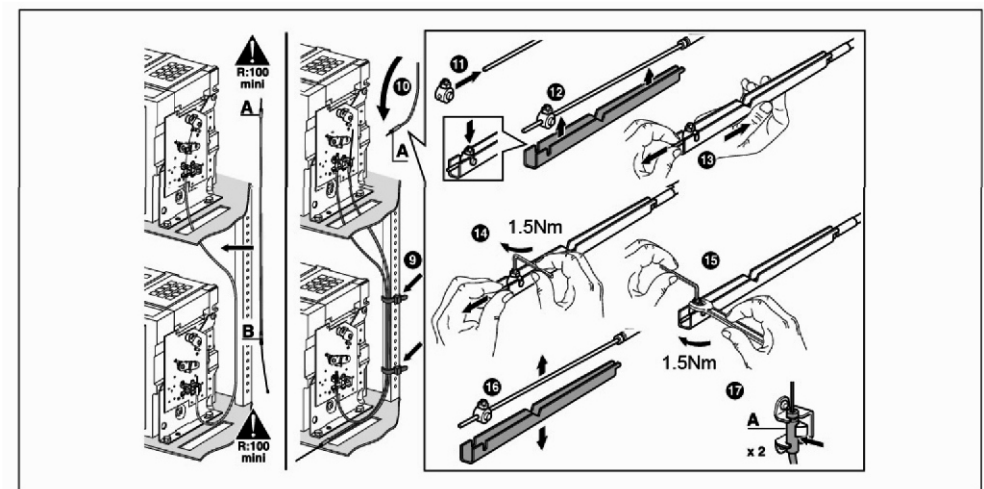
- 1 Install the sleeve of the end A of the rope as shown in figure
- 2 Arrange the rope and determine the required length
- 3 4 Tighten the end A of the rope upwards and cut off the end B at the spring
- 5 6 Remove the sleeve and fastenings at the cut-off end, and assemble the sleeve onto the end B of the rope
- 7 Ensure that the contact length of the sleeve and the rope is 15mm
- 8 Lower the end A of the rope



Install the HDW3-1600/2000/3200/4000/6300 two-unit rope interlock

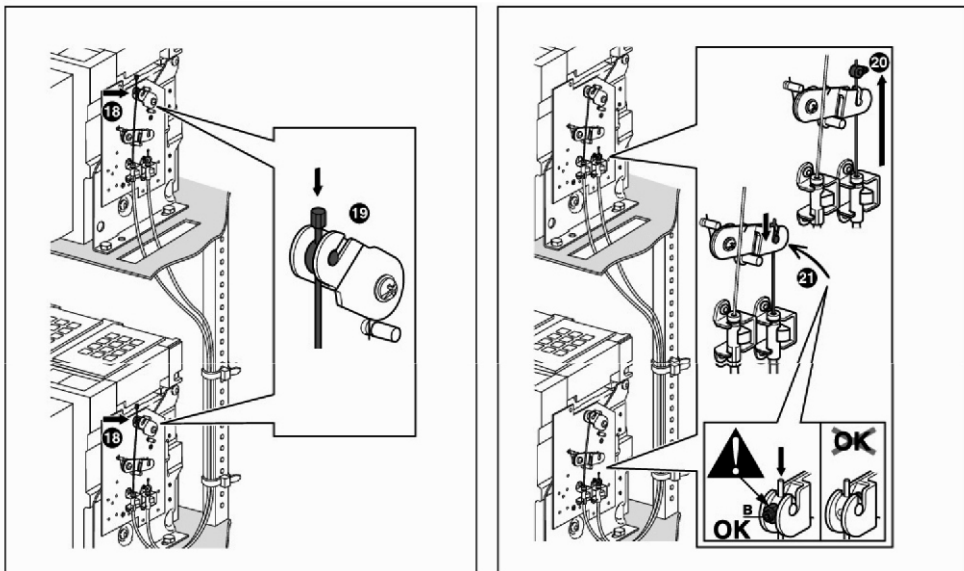


Install the HDW3-1600/2000/3200/4000/6300 two-unit rope interlock



- 9 Determine the length for the other rope in the same way, and fix two ropes on the bracket
- 10 11 Remove the end B of the rope and assemble the fastenings onto the rope
- 12 13 Place the rope and fastenings into the metal slot and tighten the rope
- 14 Tighten the screws of the fastenings
- 15 Tighten the nuts of the fastenings
- 16 Take the rope out of the metal slot
- 17 Fix the sleeve onto the interlock plate

Install the HDW3-1600/2000/3200/4000/6300 two-unit rope interlock



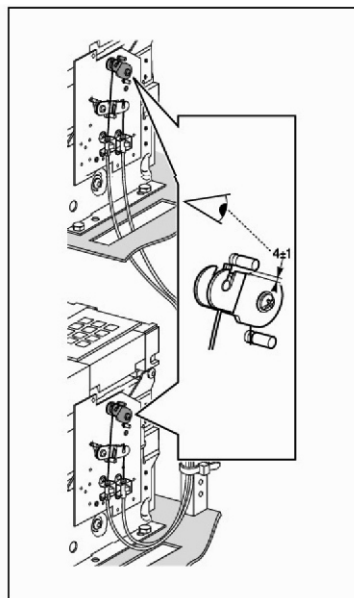
- 18 19 Install the fastenings of the end A of the rope as shown in Figure
- 20 21 Install the fastenings of the end B of the rope at the specified position

Install the HDW3-1600/2000/3200/4000/6300 two-unit rope interlock

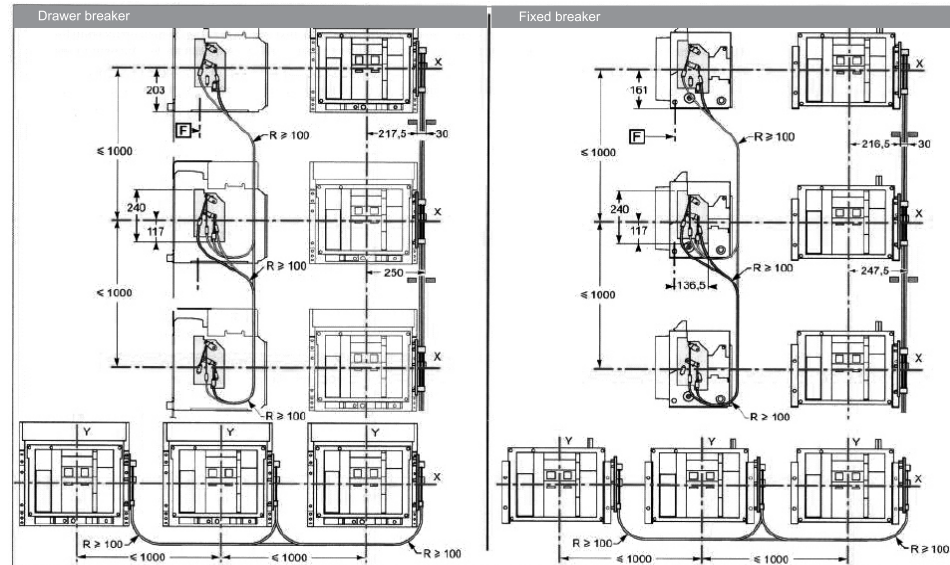
The operation methods of two-unit rope interlock are listed in the table below

Breaker 1#	Breaker 2#
0	0
0	1
1	0

0 = OFF 1 = ON



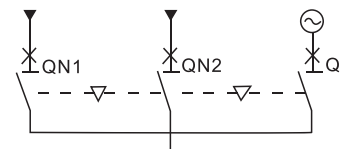
Install the HDW3-4000 three-unit rope interlock



- F Datum point maxi: Max. mini: Min. Note: The preparation for three-unit interlock is same with that for two-unit interlock. For details, refer to P2, P5 and P6.

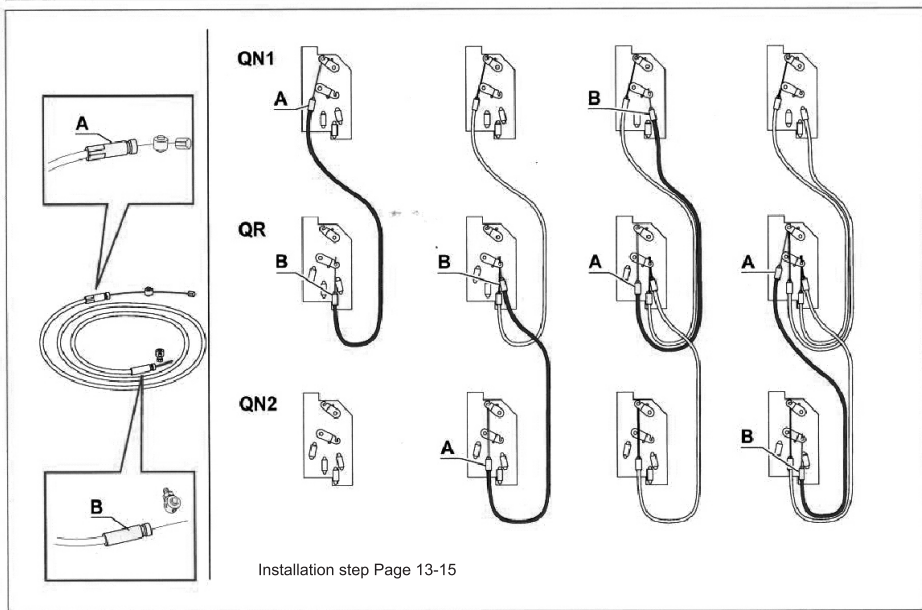
Install the HDW3-4000 three-unit rope interlock

The operation methods of three-unit rope interlock are listed in the table below

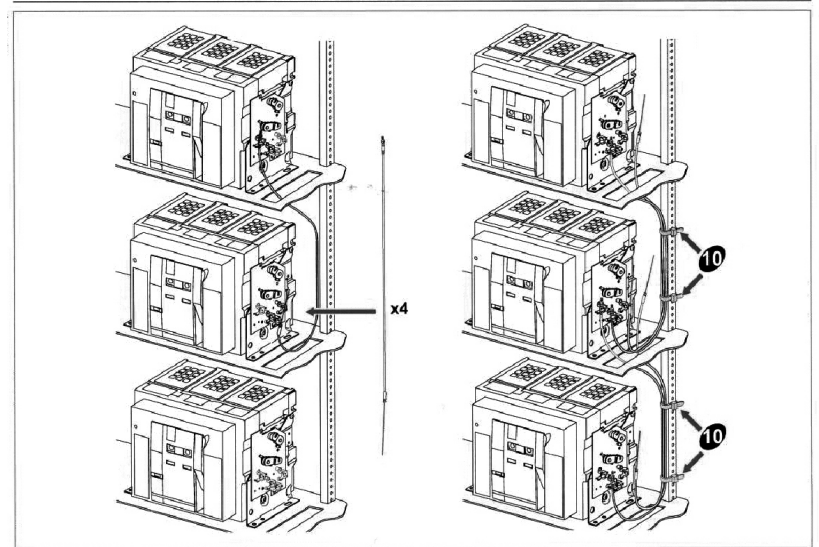
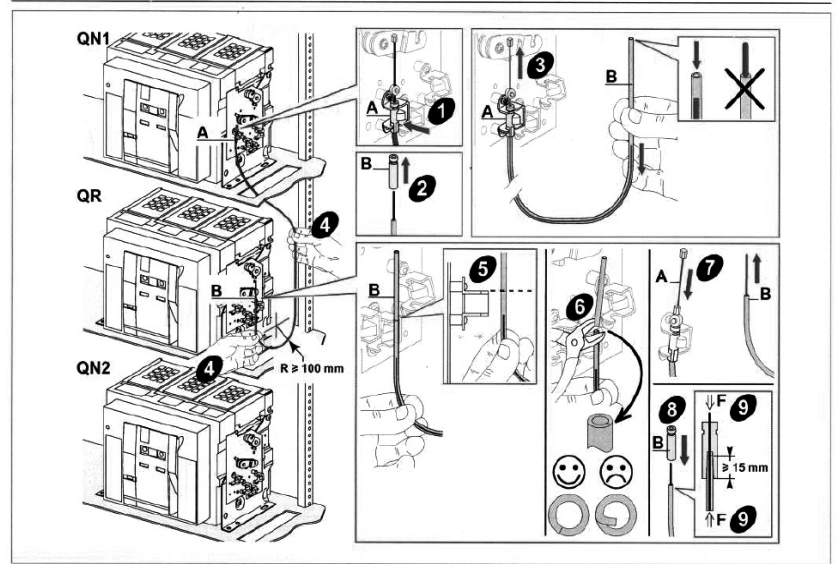
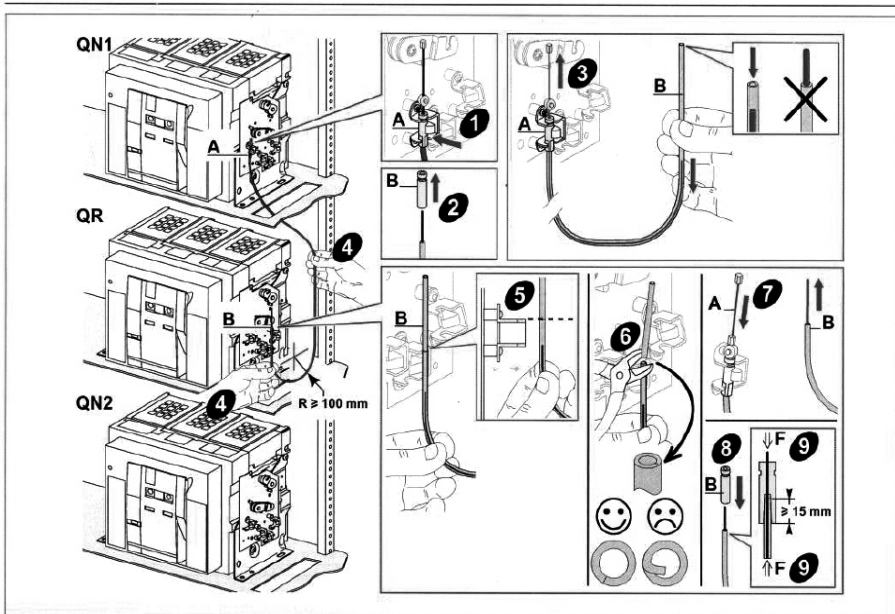


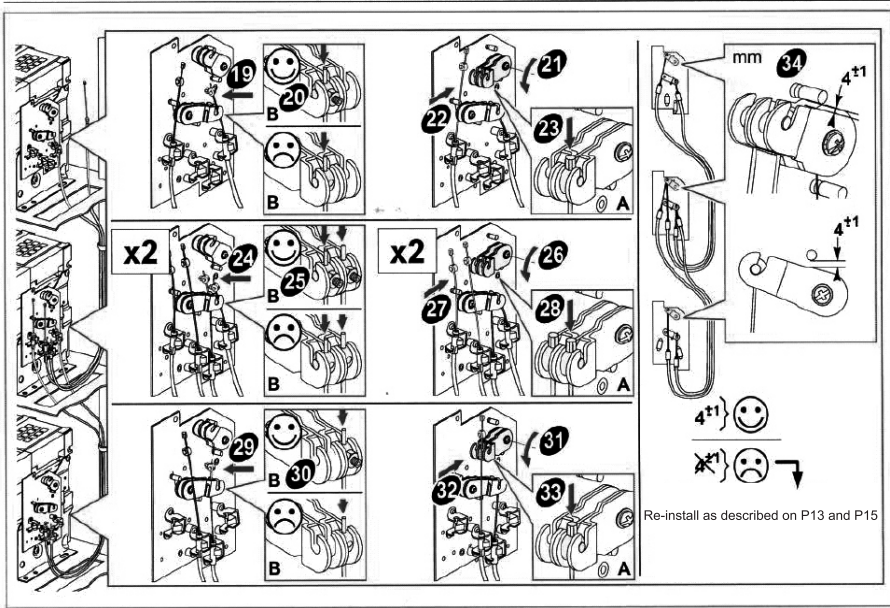
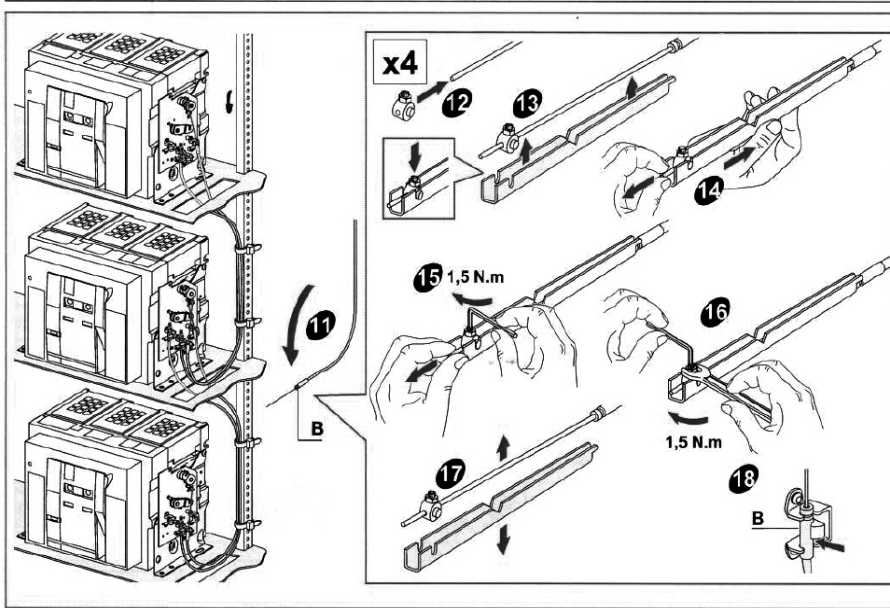
QN1	QN2	QR
0	0	0
1	0	0
0	1	0
1	1	0
0	0	1

Install the HDW3-2000/3200/4000/6300 three-unit rope interlock

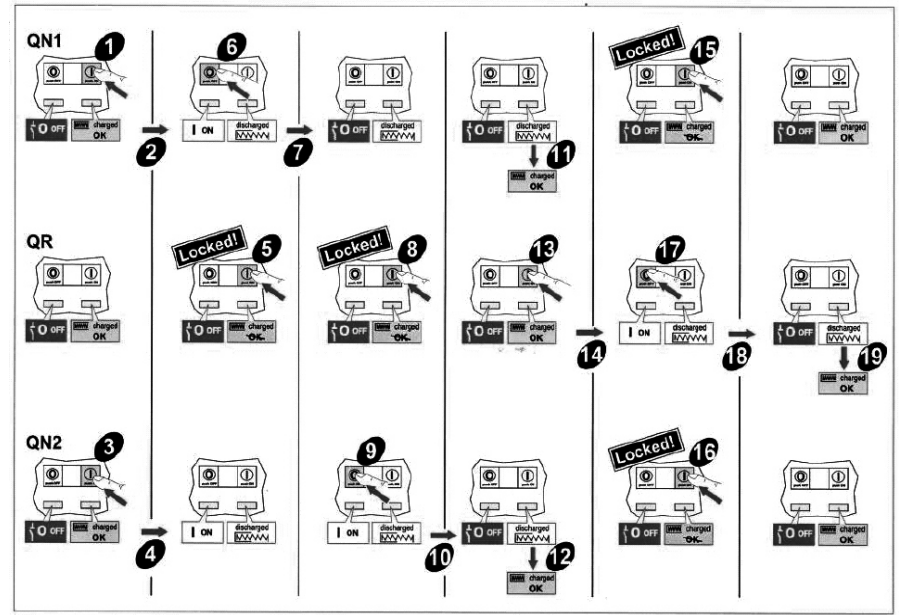


Install the HDW3-2000/3200/4000/6300 three-unit rope interlock





Test



Installation Manual for Lever Interlock

Warning

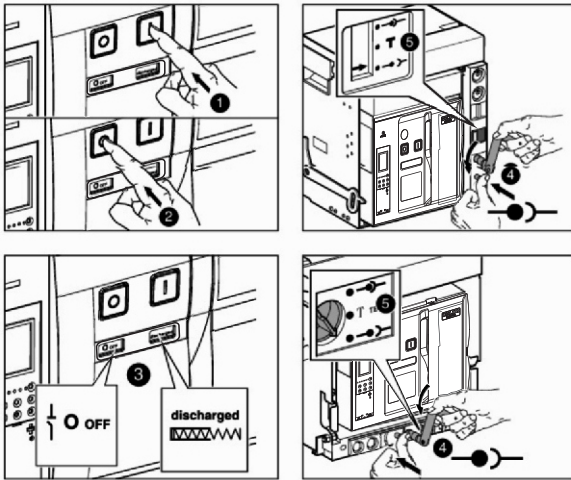
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Be careful to prevent electric shock, burns or explosion

- This equipment is only installed by the professionals
- Cut off the main and auxiliary power supplies before inspection
- Determine the voltage with the appropriate voltage measurement device
- Restore all interlocks, doors and panels before storing energy

Failure to the above regulations may result in damage to the equipment, personnel injury or death

Preparation

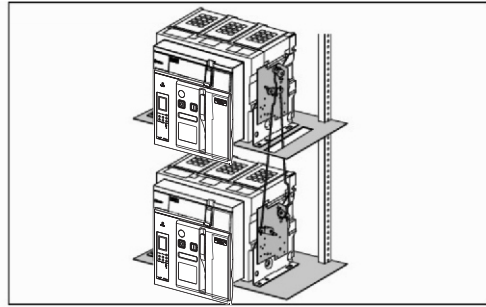
Drawer breaker



Drawer type: ① Press the ON button ② Press the OFF button ③ Confirm the switch in  OFF 

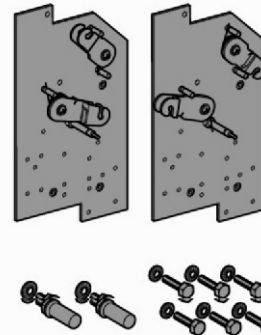
④ Swing the body out counterclockwise ⑤ Make the three-position indicator at the separation position

Fixed type: ① Press the ON button ② Press the OFF button ③ Confirm the switch in  OFF 

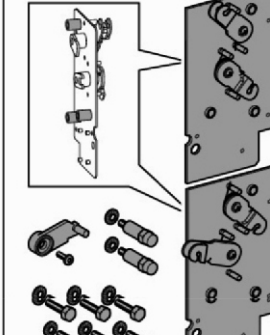


Unpack

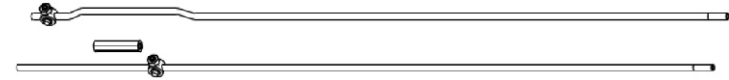
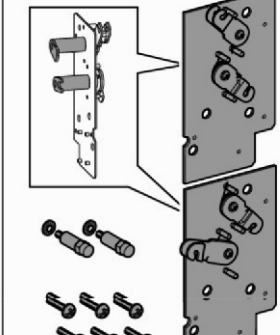
HDW3-4000 Drawer breaker



HDW3-1600 Fixed breaker

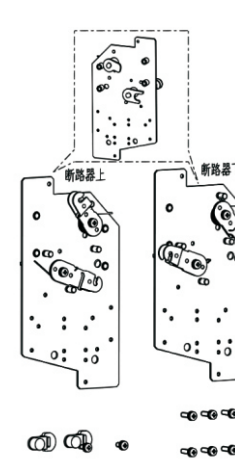


HDW3-1600 Drawer breaker

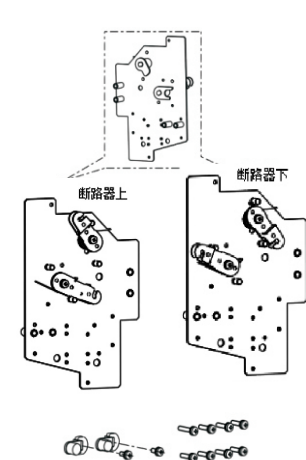


X2

HDW3-2000/3200/6300 Drawer breaker

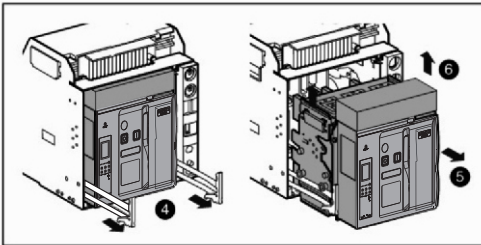
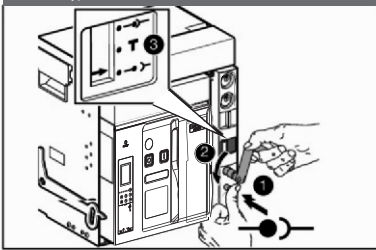


HDW3-2000/3200/6300 Fixed breaker

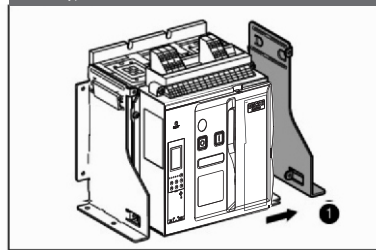


Install the HDW3-1600 rod interlock

Drawer type



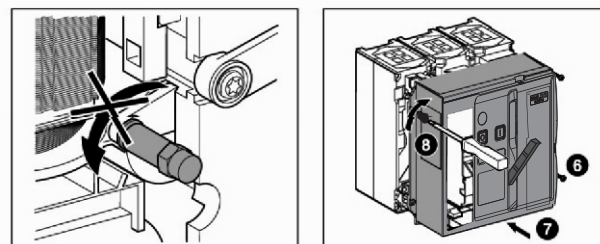
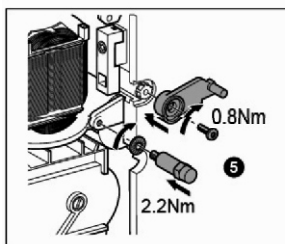
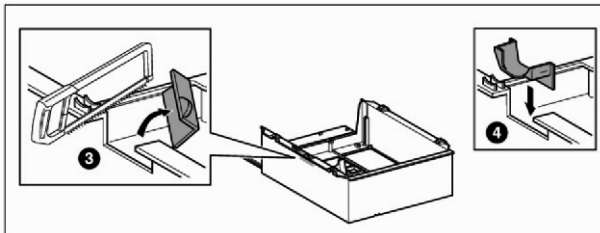
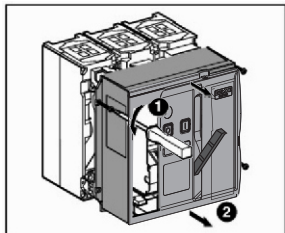
Fixed type



Fixed type: 1 Remove the right side plate of the circuit breaker

- Drawer type: 1 2 3 Swing the breaker body out of the drawer seat, as shown in Figure
 4 Pull the drawer rod out of the drawer seat
 5 6 Take the breaker out of the drawer seat

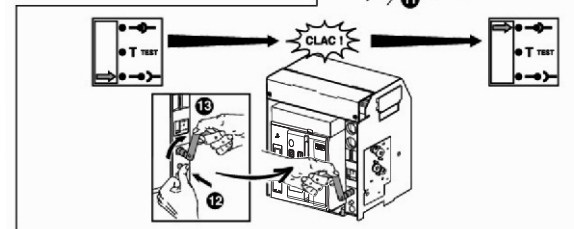
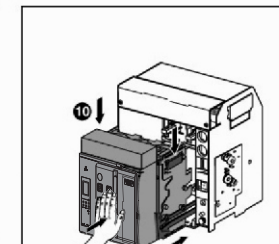
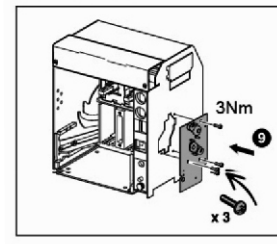
Install the HDW3-1600 rod interlock



- 1 2 Unscrew the cover screw and remove the cover
 3 Cut off the knock block on the cover with a hacksaw as shown in figure
 4 Insert the seal block at the specified position shown in figure
 5 Install the guide rod at the specified position in the direction shown in figure
 6 Extend the handle out of the cover
 7 8 Install the cover and tighten the screws

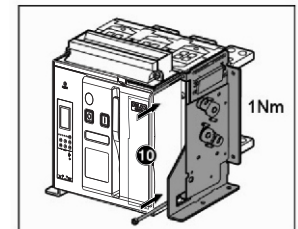
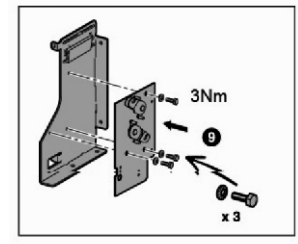
Install the HDW3-1600 rod interlock

Drawer type



- Drawer type: 9 Install the mechanical interlock plate at the specified position shown in figure
 10 11 Place the breaker on the pull rod of the drawer and push in the drawer seat
 12 13 Swing the body in the drawer seat and confirm that the body is at the "Connect" position

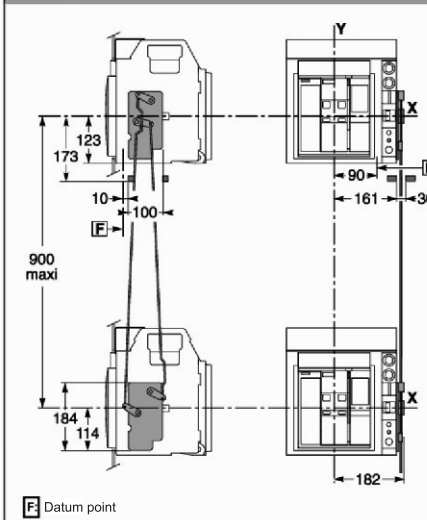
Fixed type



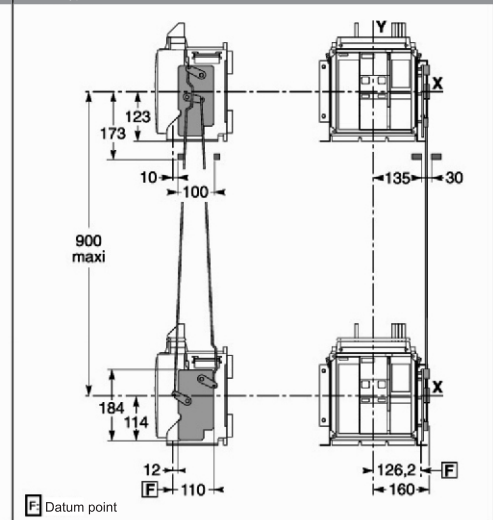
- Fixed type: 9 Install the interlock plate at the right side plate
 10 Install the right side plate on the breaker body

Install the HDW3-1600 rod interlock

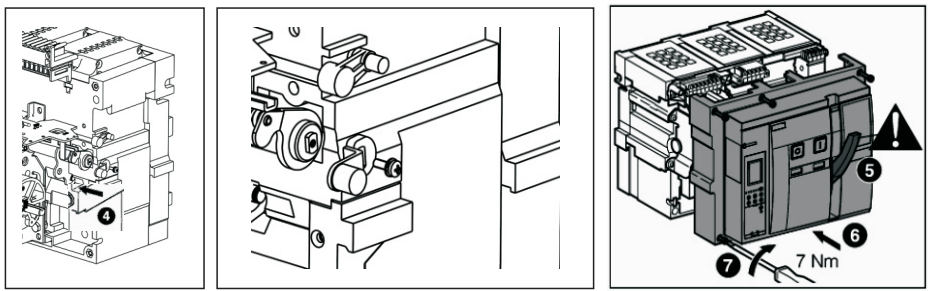
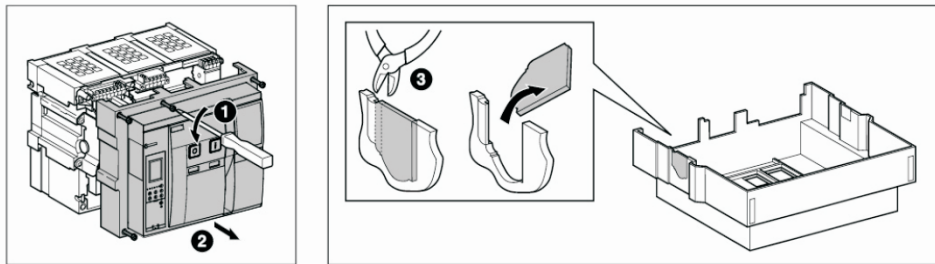
Drawer type



Fixed type

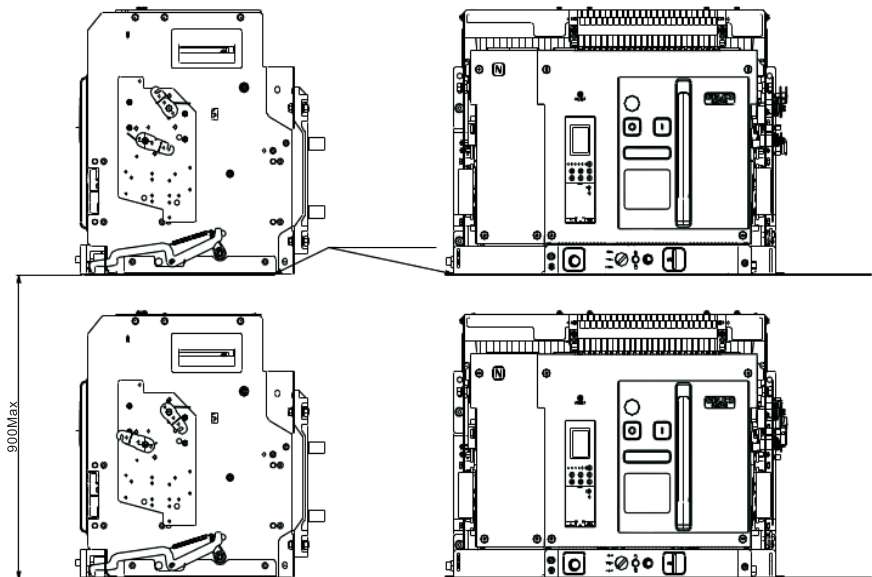


Install the HDW3-2000/3200/6300 rod interlock

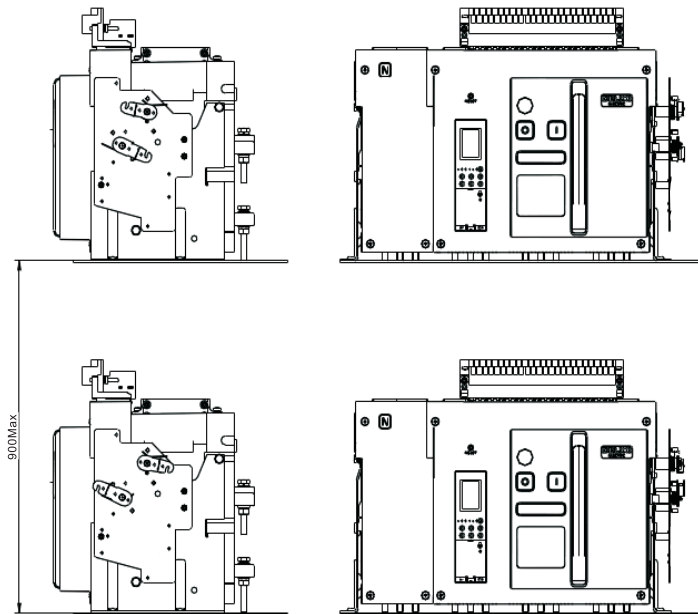


- 1 2 Release the cover screws and remove the cover
- 3 Cut off the knock block on the cover with a diagonal pliers as shown in figure
- 4 Install the interlock guide rod at the specified position shown in figure
- 5 Extend the handle out of the cover
- 6 7 Install the cover and tighten the screws

HDW3-2000/3200/6300 drawer type

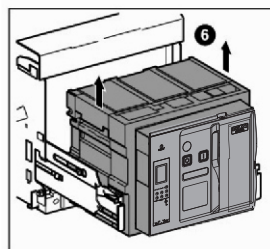
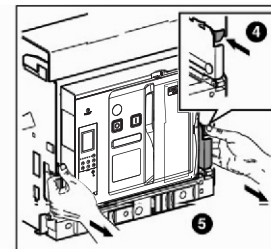
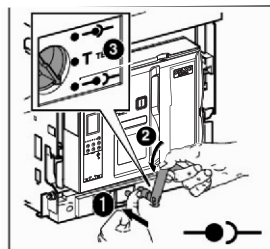


2000N/H,3200N壳架固定式断路器

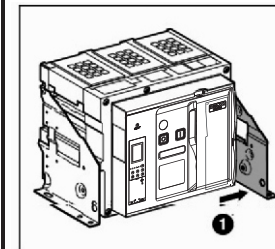


Install the HDW3-4000 rod interlock

Drawer breaker



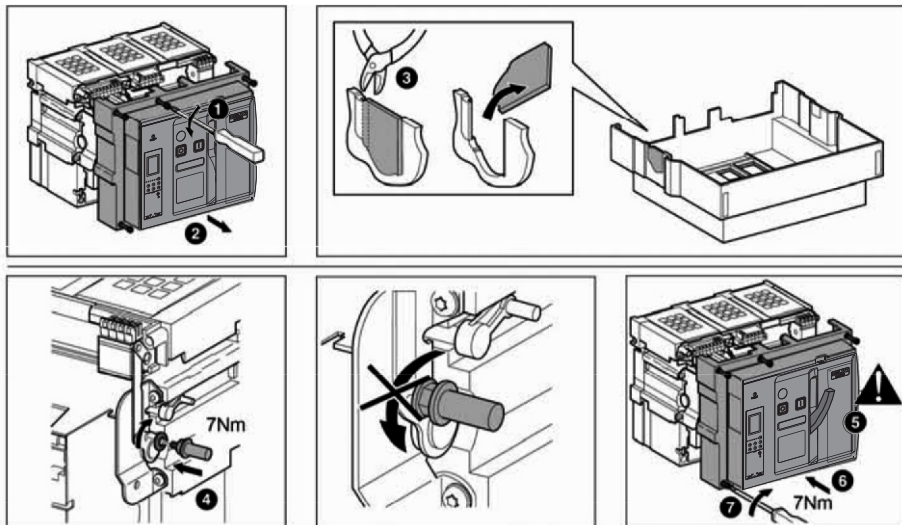
Fixed breaker



Fixed type: 1 Remove the right side plate of the breaker

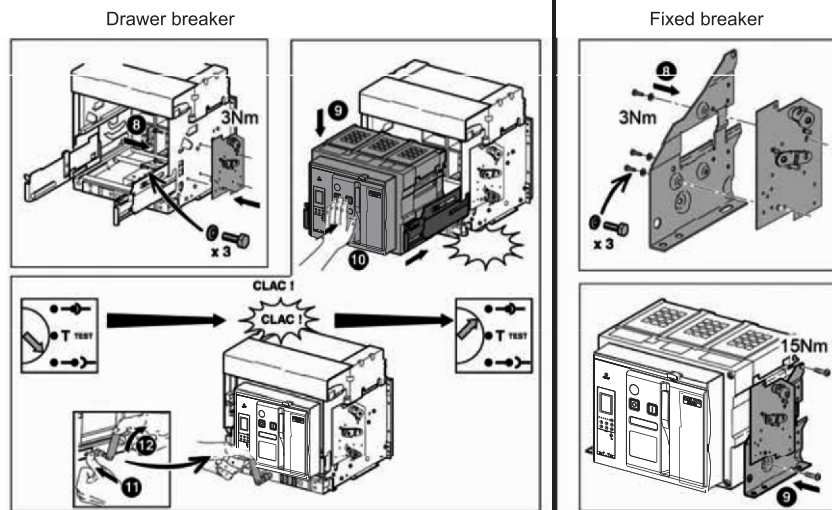
- Drawer type: 1 2 3 Swing the breaker body out of the drawer seat and check that the three-position indicator is at the separation position, as shown in figure
- 4 5 Pull the breaker out of the drawer seat, as shown in figure
- 6 Lift the breaker from the drawer seat

Install the HDW3-4000 rod interlock



- 1 2 Release the screws of the cover and remove the cover
- 3 Cut the knock block on the cover with a hacksaw as shown in figure
- 4 Insert the interlock guide rod at the specified position shown in figure
- 5 Extend the handle out of the cover
- 6 7 Install the cover and tighten the screws

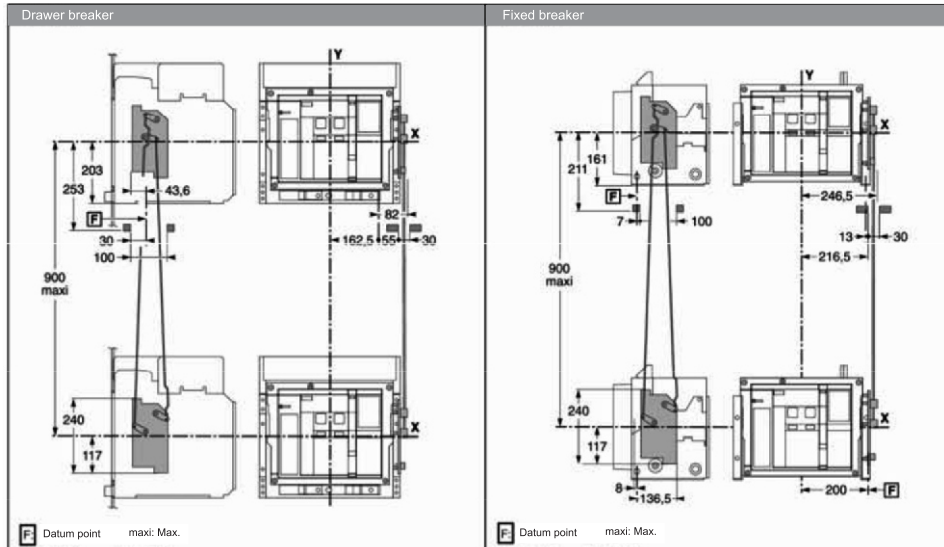
Install the HDW3-4000 rod interlock



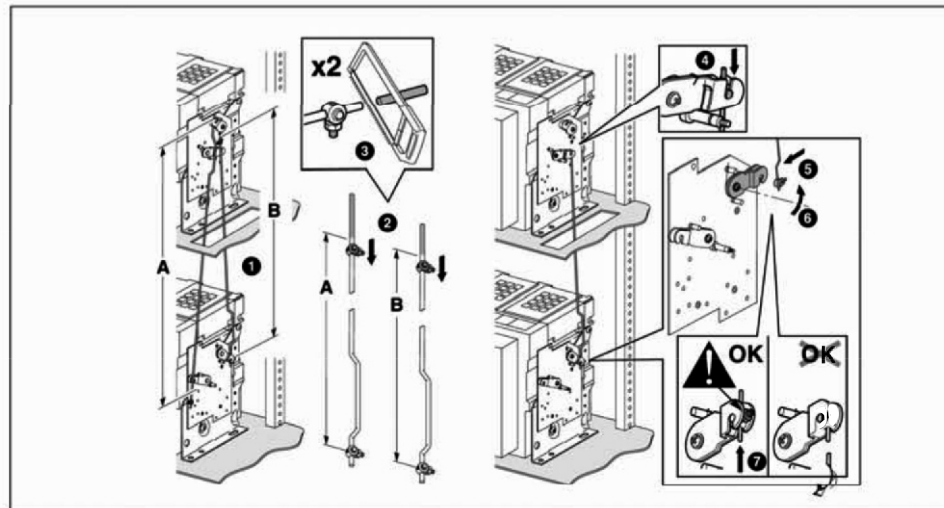
- Drawer type:
- 8 Install the mechanical interlock plate at the specified position
 - 9 10 Install the breaker body on the drawer seat
 - 11 12 Swing the breaker body in the drawer seat and confirm it at the connection position, as shown in figure.

- Fixed type:
- 8 Install and fix the interlock plate on the right side plate
 - 9 Install and fix the right side plate on the breaker body

Install the HDW3-4000 rod interlock

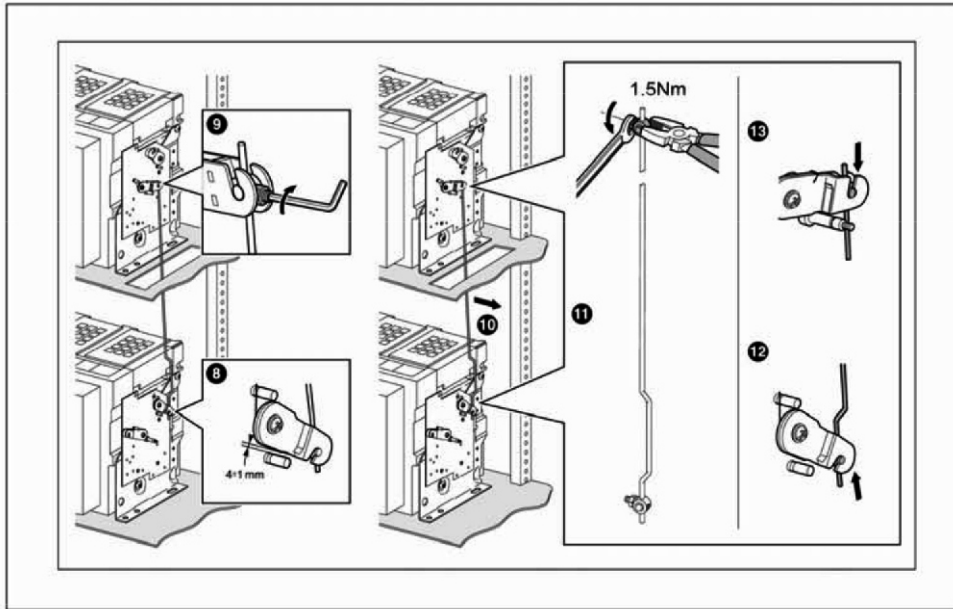


Install the HDW3-4000 rod interlock



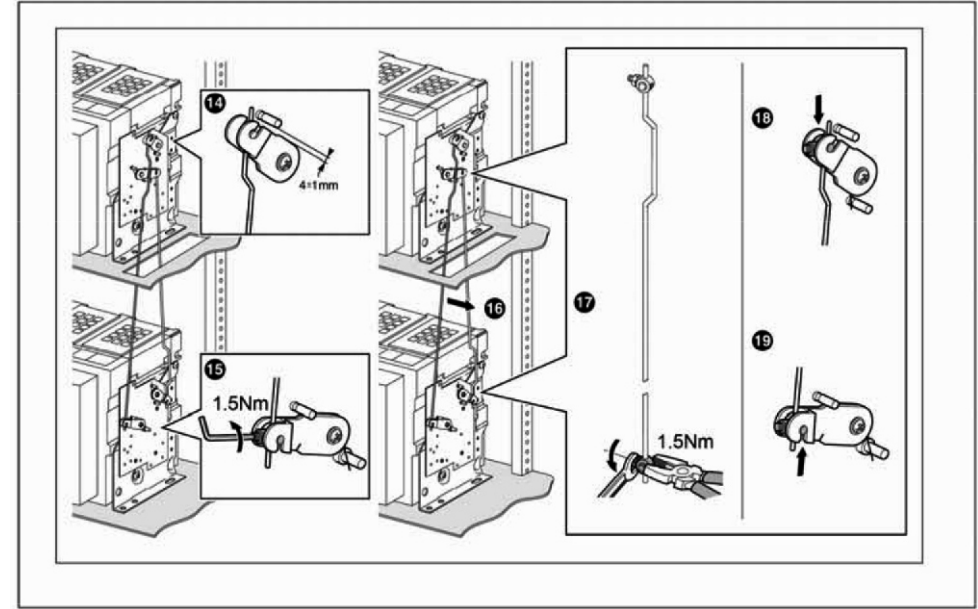
- 1 Determine the length of the lever according to the position of the switch
- 2 Place the lever screw locking head within the effective length
- 3 Saw off the excessive length with a saw
- 4 5 6 Install the lever at the specified position in the direction shown in figure

Install the HDW3-1600/2000/3200/4000/6300 rod interlock



- 8 Pull the upper connecting rod of the lower mechanical interlock plate upwards until the distance from the lower positioning pin is $4\pm 1\text{mm}$
- 9 Tighten the screws of the screw locking head on the lever
- 10 Remove the lever
- 11 Remove the nut from the upper end of the lever
- 12 13 Re-install the lever on the interlock plate

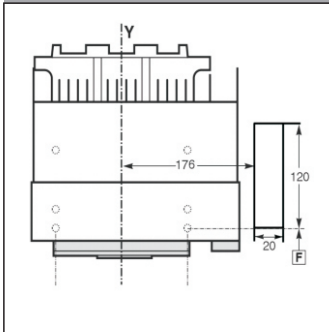
Install the HDW3-1600/2000/3200/4000/6300 rod interlock



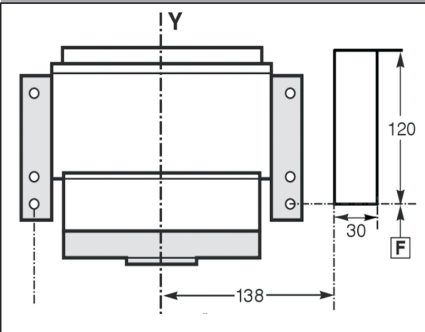
- 14 Pull the upper connecting rod of the lower mechanical interlock plate upwards until the distance from the lower positioning pin is $4\pm 1\text{mm}$
- 15 Tighten the screws of the screw locking head on the lever
- 16 Remove the lever
- 17 Remove the nut from the upper end of the lever
- 18 19 Re-install the lever on the interlock plate

The recommended holes size on base plate

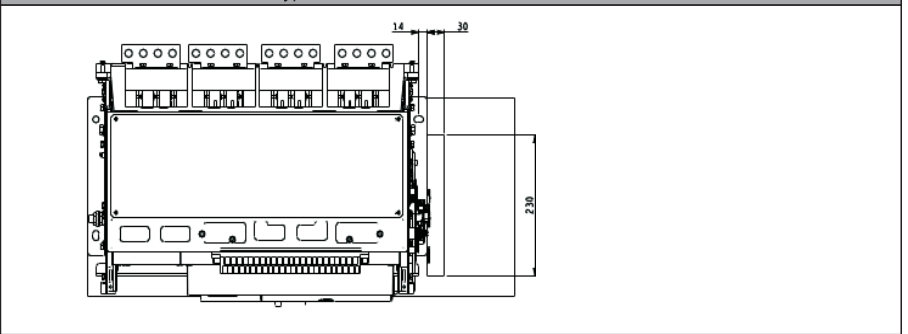
HDW3-1600 drawer type



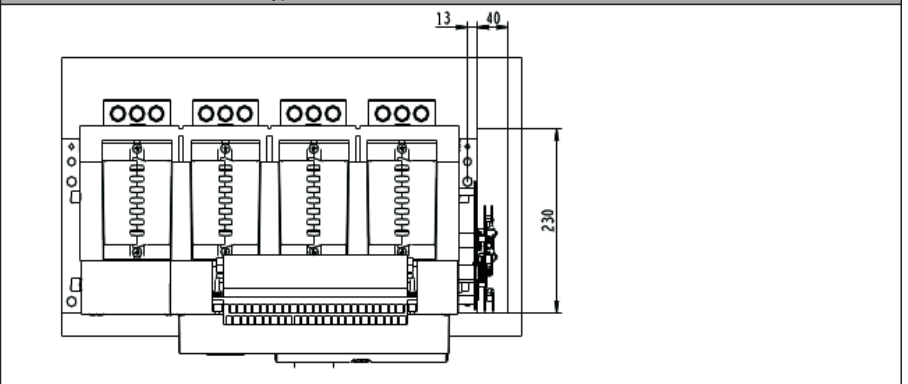
HDW3-1600 fixed type



HDW3-2000/3200/6300 drawer type



HDW3-2000/3200/6300 fixed type



HDW3-4000 drawer type HDW3-4000 fixed type

