



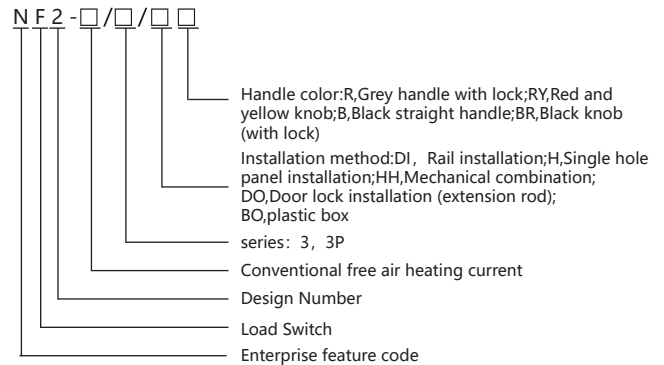
NF2 Load Switch

1. General

NF2 series load switch (hereinafter referred to as switch), mainly used in electrical circuits with AC 50Hz or 60Hz, rated working voltage up to 690V, and rated working current up to 125A, It can be used to isolate faulty equipment or perform power outage maintenance. It can be used as the main switch of machine tools, fans, and pumps, and can also be used as the start-stop switch of small-capacity motors.
Standards compliant: IEC/EN 60947-3,GB/T 14048.3

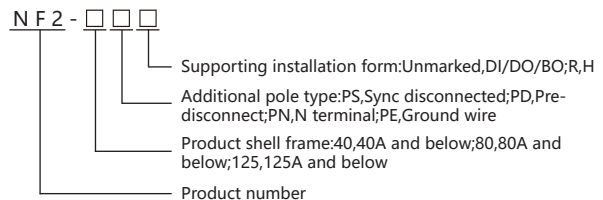
2. Type designation

2.1 Load switch model and its meaning

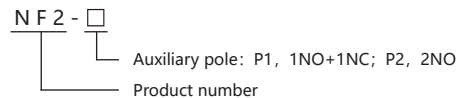


Note: 4-pole products are realized by means of 3 poles + additional poles.

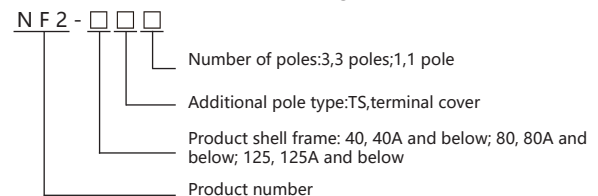
2.2 Additional pole model and its meaning



2.3 Auxiliary pole model and its meaning



2.4 Terminal cover model and its meaning



3. Normal use and installation conditions

3.1 Normal use conditions

3.1.1 Ambient air temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$, and the average temperature within 24h does not exceed $+35^{\circ}\text{C}$.

3.1.2 Altitude: The altitude of the installation site does not exceed 2000m.

3.1.3 Humidity: When the highest temperature is $+40^{\circ}\text{C}$, the relative humidity of the air does not exceed 50%, and higher relative humidity is allowed at lower temperatures, for example, up to 90% at 20°C . Special measures should be taken for the occasional condensation due to temperature changes.

3.1.4 Pollution degree: Level 3.

3.2 Installation conditions

3.2.1 Install in a place where there is no significant shaking, shock and vibration, and no rain or snow; in a medium without explosion hazard; where there is no place that is sufficient to corrode metal and damage insulation (including conductive dust);

3.2.2 Installation category: Class III.

3.3 Transport and storage conditions

3.3.1 The following temperature ranges are suitable for transportation and storage: between -25°C and $+55^{\circ}\text{C}$. Up to $+70^{\circ}\text{C}$ in a short time (24h)

Note: When the above-mentioned normal use, installation, transportation and storage conditions are exceeded, the user should reach a special agreement with the company.

4. Technical data

Table 1 Main technical parameters

Model	NF2							
	NF2-40			NF2-80		NF2-125		
Frame grade								
Rated insulation voltage U_i (V)	800							
Rated impulse withstand voltage U_{imp} (kV)	8							
Conventional free air heating current I_{th} (A)	25	32	40	63	80	100	125	
	25	32	40	63	80	100	125	
Rated working current I_e (A, AC-23A)	25	25	25	63	63	80	100	
	25	25	25	40	40	63	63	
Rated short-time withstand current $I_{cw,1s}$ (kA)	1.26			1.5		2.75		
Rated short-circuit making capacity I_{cm} (kA)	1.8			2.1		3.9		
Number of poles	3P、3P+N							
Wiring capacity (hard wire,cross-sectional area)(mm ²)	1.5~16			2.5~35		10~70		
Tightening torque of terminal screws (N.m)	1.2~1.4			2.5~2.8		3.5~4		
Electrical life (times)	2000							
Mechanical life (times)	100000							
Protection level	IP20, IP65 (With protective shell)							

Table 2 Main technical parameters of HH mechanical assembly

Model	NF2-HH (mechanical combination)									
	IM2 mechanical combination system: use 6-8 pole combination			IM31 mechanical interlocking structure: for 3/4 pole I - I + II- II				IM32 mechanical interlocking mechanism: used for 3/4 pole I -O- II conversion		
Specification										
Rated insulation voltage U_i (V)	800									
Rated impulse withstand voltage U_{imp} (kV)	8									
Conventional free air heating current I_{th} (A)	63	80	100	63	80	100	63	80	100	
	415V	63	80	80	63	80	80	63	80	80
Rated working current I_e (A, AC-23A)	500V	63	63	63	63	63	63	63	63	63
	690V	40	40	40	40	40	40	40	40	40
Rated short-time withstand current $I_{cw,1s}$ (kA)	1.5									
Number of poles	6、8									
Wiring capacity (hard wire,cross-sectional area)(mm ²)	2.5~35									
Tightening torque of terminal screws (N.m)	2.5~2.8									
Electrical life (times)	2000									
Mechanical life (times)	100000									

5. Structural features and working principle

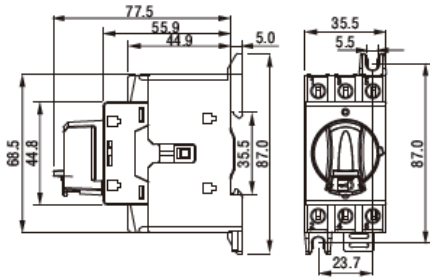
5.1 The switch is mainly composed of a handle, an operating mechanism, a contact system, a shell, and accessories. The operating mechanism adopts spring energy storage, the connection and breaking speed has nothing to do with the speed of the operating handle, ensuring the connection and breaking capacity of the product; the contact system adopts a double-breakpoint bridge structure; the wiring method adopts the wire frame method; the installation method adopts the front panel Installation (rail installation, screw installation), panel installation; the shell is made of flame-retardant reinforced polyamide material, which has good flame-retardant performance, dielectric performance and carbonization resistance.

5.2 The switch 3-pole body adds some standard accessories and can be combined into a 6/8-pole load switch or 3/4-pole transfer switch, and a neutral pole, grounding pole or auxiliary contact can also be added;

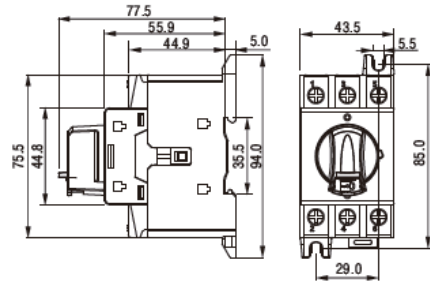
6. Overall and mouting dimensions

The outline and installation dimensions of the switch are shown in following. See the box sticker for model specifications and weight.

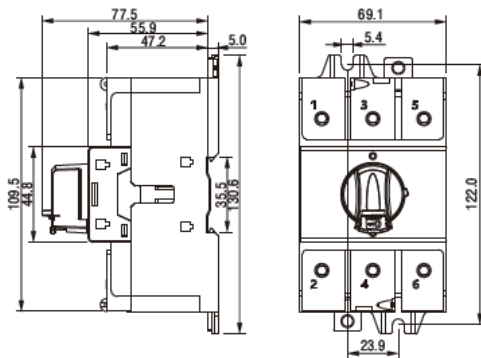
NF2-40/DI



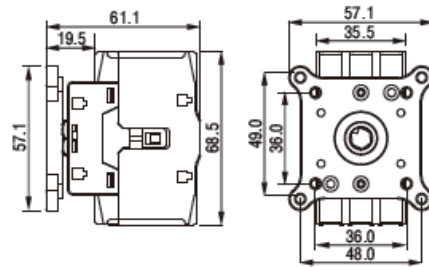
NF2-80/DI



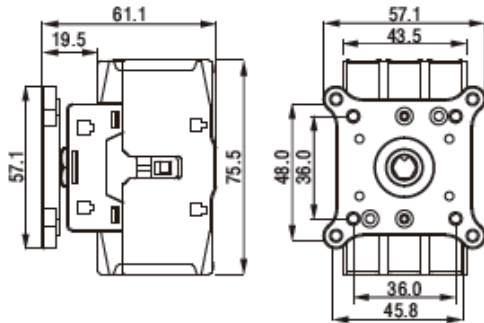
NF2-125/DI



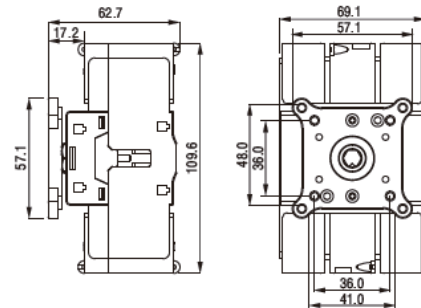
NF2-40/H



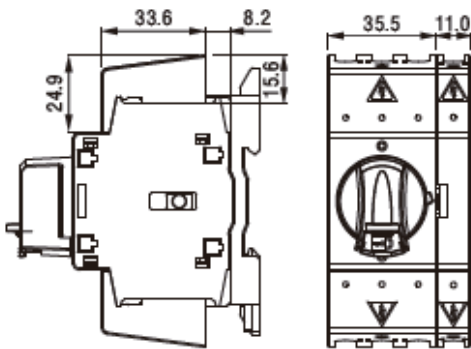
NF2-80/H



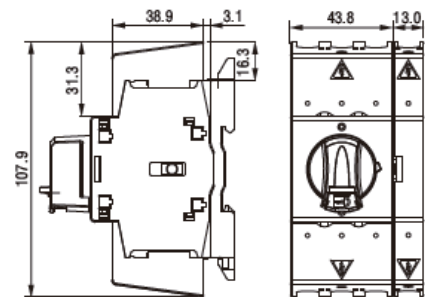
NF2-125/H



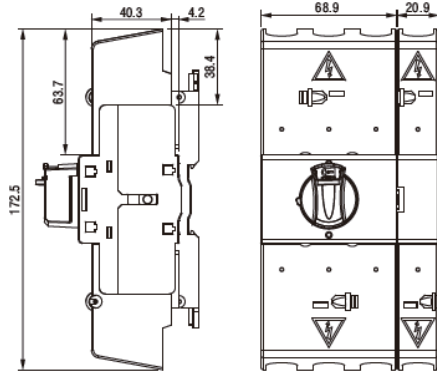
NF2-40/TS



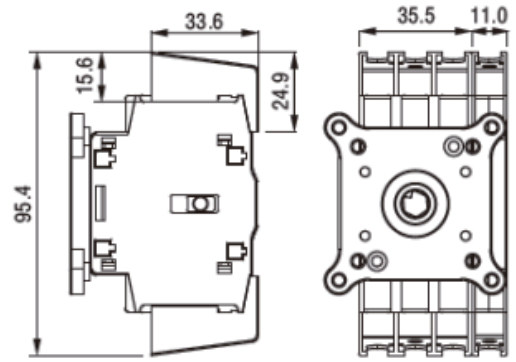
NF2-80/TS



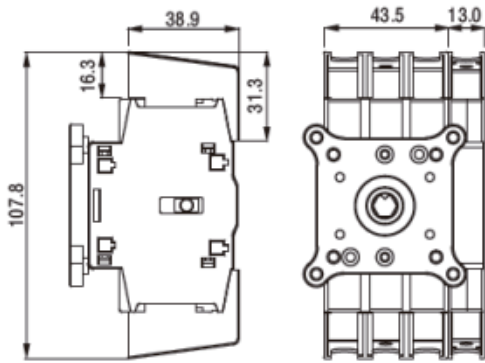
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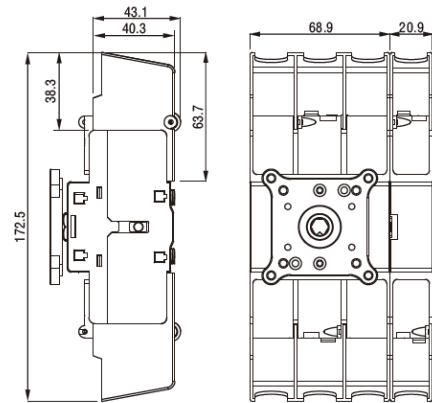
NF2-40/HTS



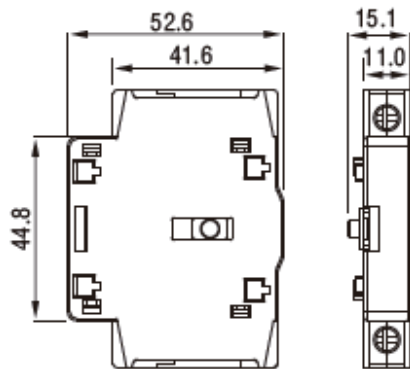
NF2-80/HTS



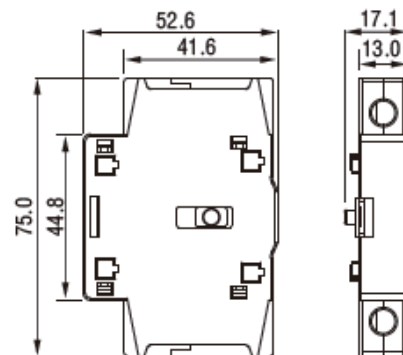
NF2-125/HTS



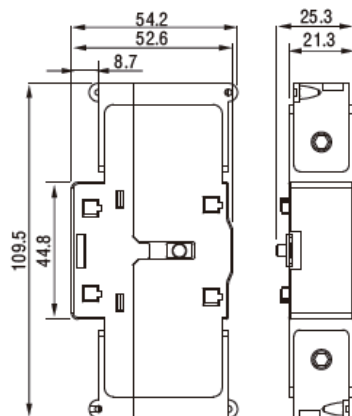
NF2-40/PN\PS\PD\PE



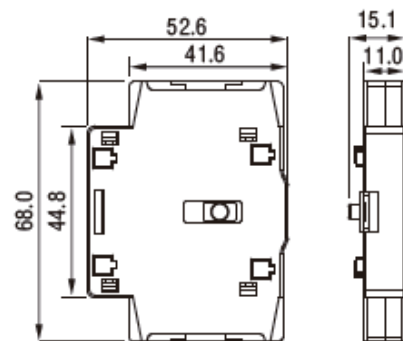
NF2-80/PN\PS\PD\PE



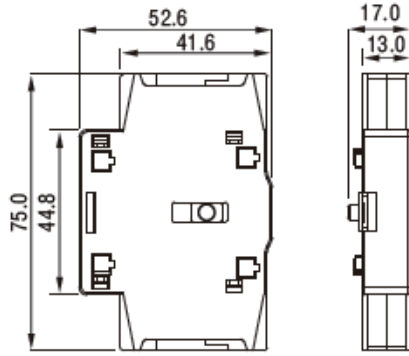
NF2-125/PN\PS\PD\PE



NF2-40/PNR\PSR\PDR\PER

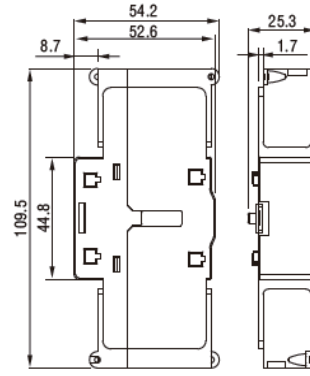


NF2-40/PNR\PSR\PDR\PER

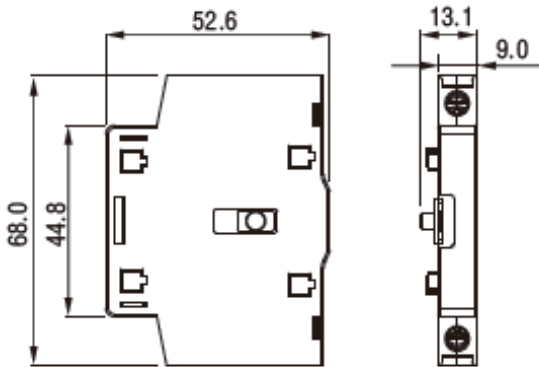


NF2-P1, P2

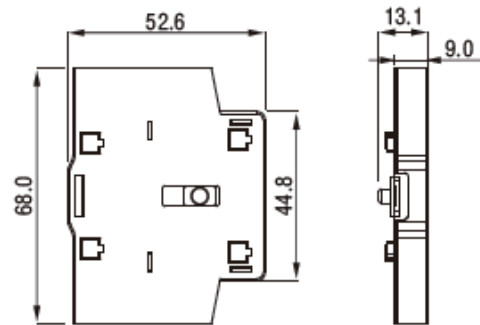
NF2-125/PNR\PSR\PDR\PER



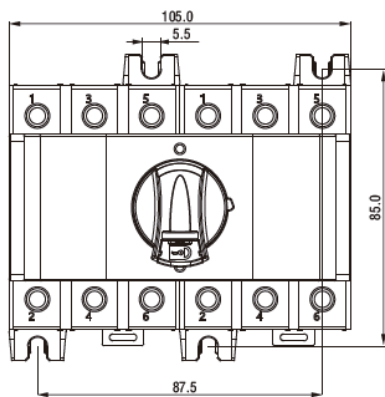
NF2-P1, P2



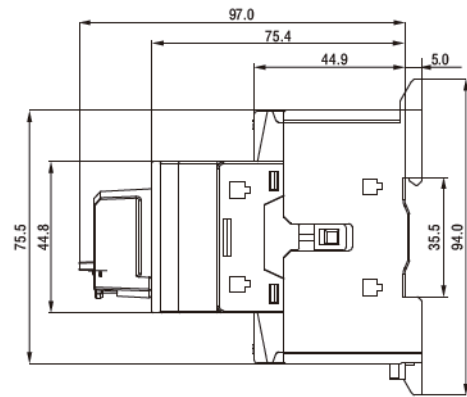
NF2-HH



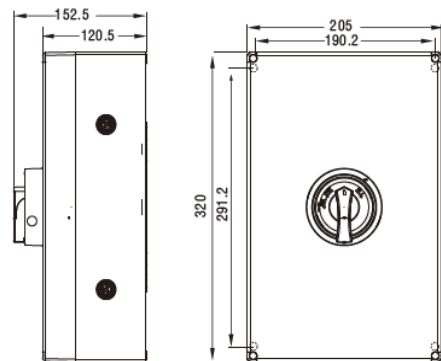
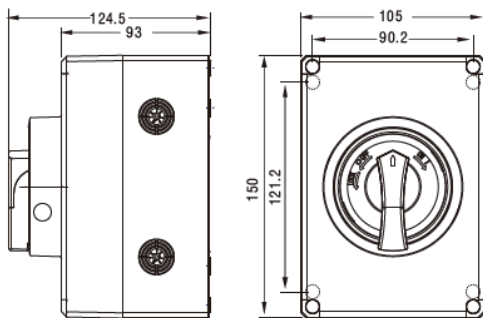
NF2-P1R, P2R



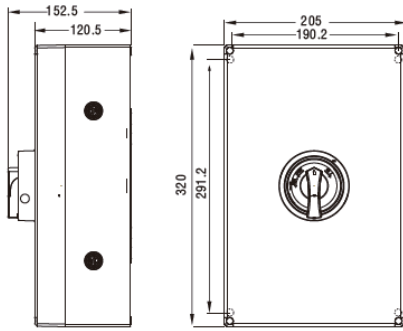
NF2-40/BO



NF2-80/BO



NF2-125/BO



7. Order information

7.1 Check before installation

7.1.1 The technical data on the nameplate meets actual requirements.

7.1.2 Appearance: clean, intact parts, no loose fasteners.

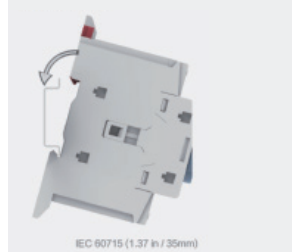
7.1.3 Check the operating performance: perform 3 times of closing and opening operations, the product action is flexible and reliable; the handle points to the "ON" position, all contacts are in the on state; the handle points to the "OFF" position, and all the contacts are in the off state.

7.2 Installation method and precautions

7.2.1 Screw installation: confirm that the switch is in the off state → open a hole on the mounting plate and tap the screw → connect the switch and the mounting plate with screws and tighten

7.2.2 Guide rail installation: confirm that the switch is off → the guide rail is fixed in the cabinet → install the switch as shown in Figure 26

Figure 26 Guide rail installation sketch



7.2.3 Panel installation: confirm that the switch is in the off state → the mounting plate is open → the screw assembly connects the body, the installation panel and the installation plate → the name plate → the cover → the handle → tighten the screw. As shown in Figure 27

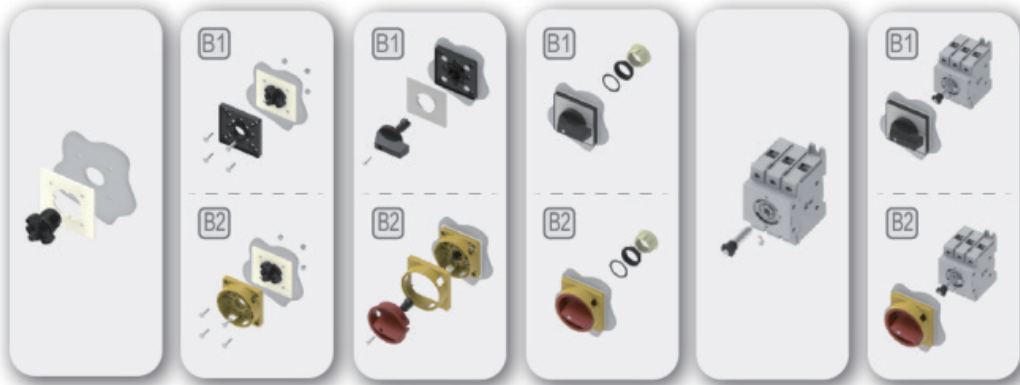


Figure 27 Panel installation sketch

7.2.4 Terminal cover and lock installation: as shown in Figure 28,29

Figure 28 Installation diagram of terminal cover

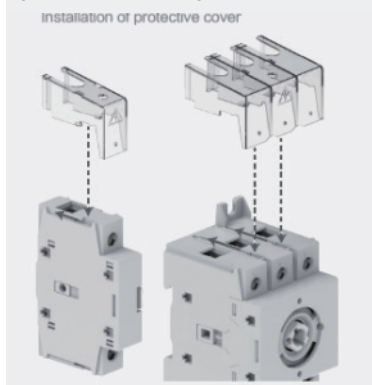
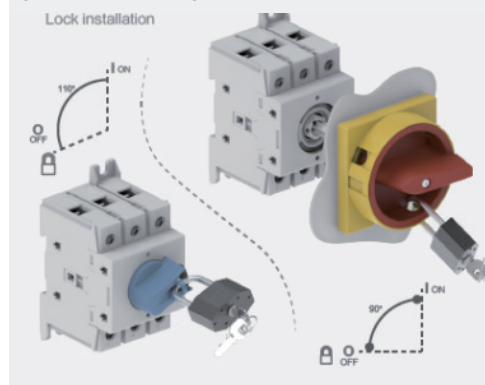


Figure 29: Schematic diagram of lock installation



7.2.5 Additional auxiliary contact/additional fourth pole installation: as shown in Figure 30,31

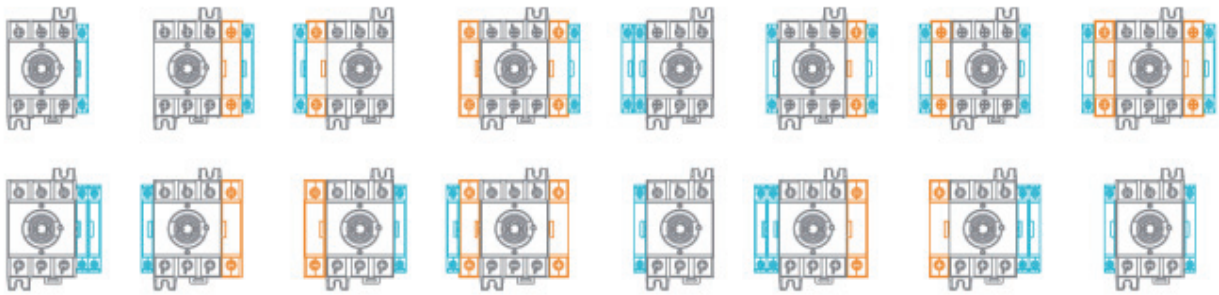


Figure 30 Schematic diagram of accessory pole/auxiliary contact matching

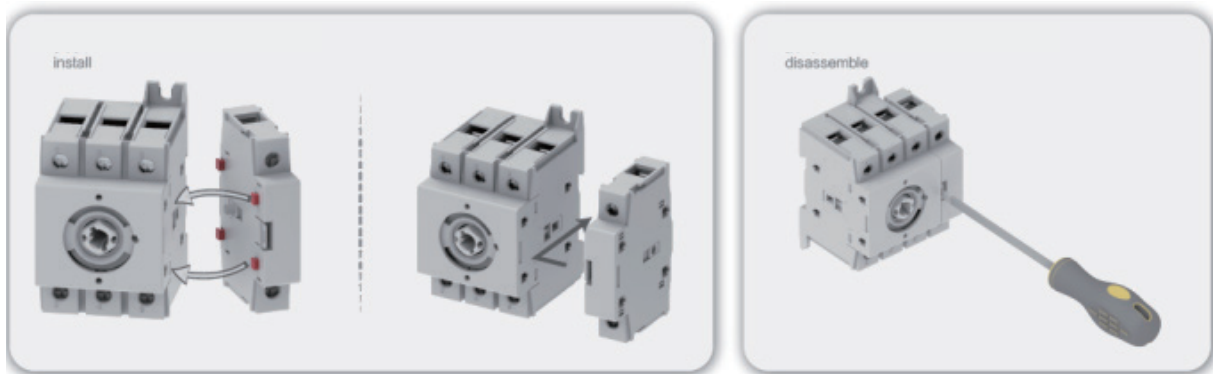


Figure 31 Schematic diagram of attachment pole installation

8. Maintenance and storage period

8.1 Daily maintenance

Take appropriate measures to remove dust, water vapor, conductive dust and corrosive substances. Non-professionals of the company are not allowed to disassemble and repair.

8.2 Maintenance and maintenance during operation

8.2.1 Confirm that the wiring terminals are in good contact, there is no looseness, and the wire connection is reliable.

8.2.2 During use, all parts of the product should be checked frequently to ensure that no moving parts are stuck and fasteners are not loosened to ensure safety and reliability. If the parts are damaged, they should be replaced in time.

8.3 Maintenance cycle

It is recommended to check and maintain it once a month.

8.4 Long-term use and storage period

The product should be disconnected when not in use, and should be stored in a ventilated, dry, non-corrosive gas warehouse. The product or packaging should not be placed directly on the ground to avoid damage.

9. Warranty period and environmental protection and other legal regulations

9.1 Warranty period

Under normal storage and transportation conditions, the product packaging or the product itself is intact, and the product has a warranty period of 24 months from the date of production. The following conditions are not covered by the warranty:

- 1) Damage caused by improper use, storage and maintenance by the user.
- 2) Damage caused by the organization or personnel not designated by the company, or the user's disassembly, assembly and maintenance.
- 3) The product has exceeded the warranty period.
- 4) Damage caused by force majeure.

9.2 Environmental protection

In order to protect the environment, when this product or its components are scrapped, please dispose of them properly as industrial waste; or hand them to a recycling station for classification, disassembly, recycling, etc. in accordance with relevant national regulations.

10. Ordering instructions

10.1 State the model, number, delivery time, place, unit and consignee when ordering;

10.2 Order example: NF2-25/3HRY 10 units. NF2-25 3-pole single-hole panel mounting 10 sets of red and yellow knobs.

10.2.1 If you need to order a 4-pole product, it should include the main body + additional poles: such as NF2-25/3DIR 10 sets + NF2-40PS 10 sets. NF2-25 3-pole guide rail installation Blue knob 10 sets +40 frame frame Synchronously disconnect 10 sets of additional poles.

10.2.3 If you need to order a 4-pole product + auxiliary, it should include the main body + additional pole + auxiliary pole: such as NF2-32/3DOB 10 sets + NF2-40PD 10 sets + NF2-P1 10 sets. NF2-25 3-pole door lock installation Black straight handle 10 sets +40 shell frame 10 sets of pre-disconnected additional poles + 10 sets of NO1NC auxiliary.

11. Accessories overview

