

HCG5 DC Isolation Switch Specifications

Product Features:

- ◇ Below 500A meets UL certification
- ◇ The switch body adopts a special module combination
- ◇ The new visual appearance design reduces the exposed metal parts of the switch body and improves the safe operation performance of the switch
- ◇ The product has a large contact breaking distance self-patented arc extinguishing device and arc discharge system



Approvals/Standard:

- ◇UL ◇CCC
- ◇CE ◇TUV
- ◇CB ◇EAC

Product Use:

The product can carry infrequent connection and disconnection lines, with high safety and reliability

The rated operating voltage is DC1500V

Rated current DC200A~2500A new energy power system

	HC	G	5	-□	D	□	/2	□	□
Company Code									
Product Codename	G: Disconnecter series								
Design serial number	5(1500V)								
Agreed heating current (A)	500、800、1600								
DC products	DC								
Rated current(A)	500: 200、250、315、400、500; 800: 630、800 1600: 1000、1250、1600; UL I:250A II:315A III:400A IV:500A								
Number of poles	2								
Auxiliary contacts	F44:4 normally open 4 normally closed (any combination of auxiliary contacts)								
Electric control	AC/DC110;AC/DC220;AC380								

DC Disconnecter (manual)

HCG5 Rated Current	No Auxiliary Contact		Auxiliary Contact	
	Product	Part Number	Product	Part Number
200	HCG5-500D200/2	227000220202	HCG5-500D200/2F44	227000220212
250	HCG5-500D250/2	227000220203	HCG5-500D250/2F44	227000220213
315	HCG5-500D315/2	227000220204	HCG5-500D315/2F44	227000220214
400	HCG5-500D400/2	227000220205	HCG5-500D400/2F44	227000220215
500	HCG5-500D500/2	227000220206	HCG5-500D500/2F44	227000220216
630	HCG5-800D630/2	227000220207	HCG5-800D630/2F44	227000220217
800	HCG5-800D800/2	227000220208	HCG5-800D800/2F44	227000220218
1000	HCG5-1600D1000/2	227000220209	HCG5-1600D1000/2F44	227000220219
1250	HCG5-1600D1250/2	227000220210	HCG5-1600D1250/2F44	227000220220
1600	HCG5-1600D1600/2	227000220211	HCG5-1600D1600/2F44	227000220221

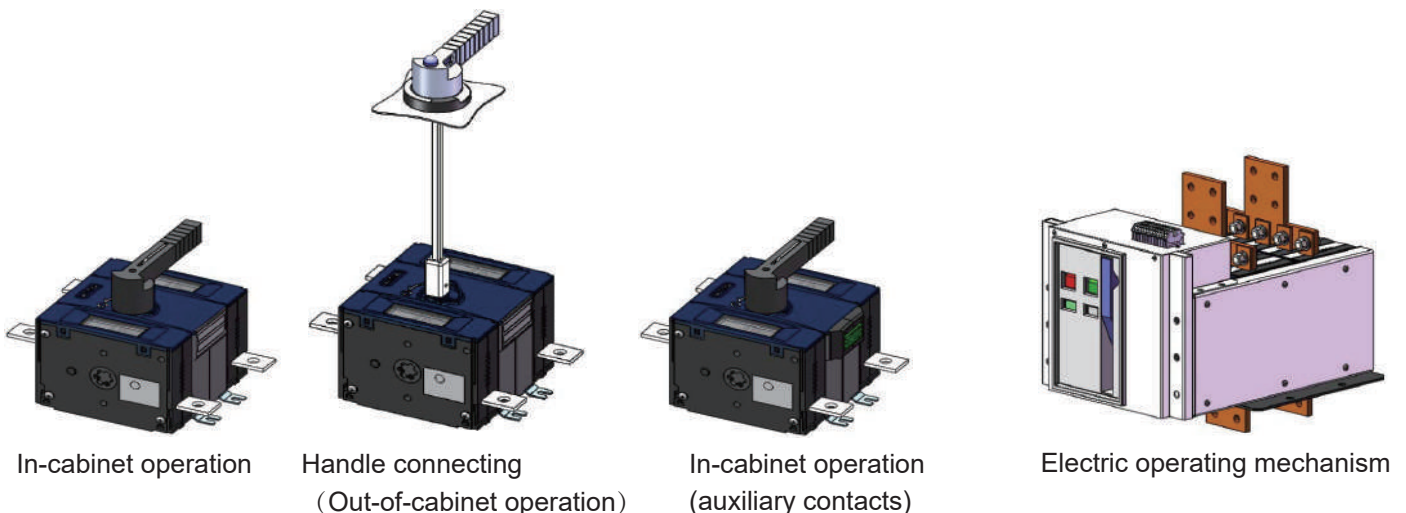
DC Disconnecter (electric control)

HCG5 Rated Current	AC/DC110V (Control voltage)		AC/DC220V (Control voltage)	
	Product	Part Number	Product	Part Number
400	HCG5-1600A400/2 AC/DC110V	227000220222	HCG5-1600A400/2 AC/DC220V	227000220231
500	HCG5-1600A400/2 AC/DC110V	227000220223	HCG5-1600A400/2 AC/DC220V	227000220232
630	HCG5-1600A400/2 AC/DC110V	227000220224	HCG5-1600A400/2 AC/DC220V	227000220233
800	HCG5-1600A400/2 AC/DC110V	227000220225	HCG5-1600A400/2 AC/DC220V	227000220234
1000	HCG5-1600A400/2 AC/DC110V	227000220226	HCG5-1600A400/2 AC/DC220V	227000220235
1250	HCG5-1600A400/2 AC/DC110V	227000220227	HCG5-1600A400/2 AC/DC220V	227000220236
1600	HCG5-1600A400/2 AC/DC110V	227000220228	HCG5-1600A400/2 AC/DC220V	227000220237
2000	HCG5-1600A400/2 AC/DC110V	227000220229	HCG5-1600A400/2 AC/DC220V	227000220238
2500	HCG5-1600A400/2 AC/DC110V	227000220230	HCG5-1600A400/2 AC/DC220V	227000220239

Annex:

Handle connecting	HCG4-HC	627000010278
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Product Appearance



Main technical parameters

Main parameters of disconnecter

Product model	HCG5-500D	HCG5-800D	HCG5-1600D	HCG5-1600D	HCG5-2500D
The type of operation	Manual type			Electric type	
Agreed heating current I _{th} (A)	500	800	1600	1600	2500
Rated operating current I _e (A)	200、250、315、400、500	630、800	1000、1250、1600	400、500、630、800、1000、1250、1600	2000、2500
Rated operating voltage U _e (V)	DC1500V				
Number of poles	2P				
Rated operating voltage U _i (V)	1500				
Rated impulse withstand voltage U _{imp} (kV)	12				
Use categories	DC21B、PV2	DC21B			
Rated short-time withstand current I _{cw}	10kA/1s		20kA/1s		100kA/200ms
Rated short-circuit turn-on current I _{cm}	10kA		20kA		50kA
Mechanical life (times)	10000		8000		
Electrical life (times)	350		300		200
Terminal tightening torque (N.m)	50~75				
Working altitude	≤2000m (If it is greater than 2000m, the capacity needs to be reduced)				
Operating temperature	-30℃~70℃				
Pollution level	Level 3				
Degree of protection	IP20、IP65				
Weight (kg)	6.6	6.7	11.9	39	52.6
authentication	UL、CCC、RoHS、CB、TUV、CE、EAC	CCC、RoHS、CB、TUV、CE、EAC	CCC、RoHS、CB、TUV、CE、EAC	CCC、RoHS、CE、EAC	CCC、RoHS、CB、TUV、CE、EAC

Auxiliary switch main parameters

◇ Electrical parameters:

Rated operating voltage	AC125V	AC230V	DC30V
Rated operating current	5A	5A	3A

◇ Rated insulation voltage: 1000V

◇ Rated impulse withstand voltage: 2.5kV

◇ Agreed heating current: 5A

◇ Rated frequency: 50/60Hz

Normal working environment

(1) The ambient air temperature is $-30^{\circ}\text{C}\sim+70^{\circ}\text{C}$, and the average temperature value within 24h does not exceed $+35^{\circ}\text{C}$.

Ambient temperature 50°C , maximum rated current degrading coefficient 0.93le;

Ambient temperature 60°C , maximum rated current degrading coefficient 0.87le;

Ambient temperature 70°C , maximum rated current degrading coefficient 0.81le;

(2) High altitude descent capacity usage

Elevation	2500m	3000m	3500m	4000m
Degrading factor	0.95le	0.91le	0.84le	0.80le

(3) The relative humidity of the atmosphere does not exceed 50% at the ambient air temperature of $+40^{\circ}\text{C}$, and higher relative humidity can be allowed at lower temperatures degree, e.g. 95% at 20°C . Special measures should be taken for occasional condensation due to temperature changes.

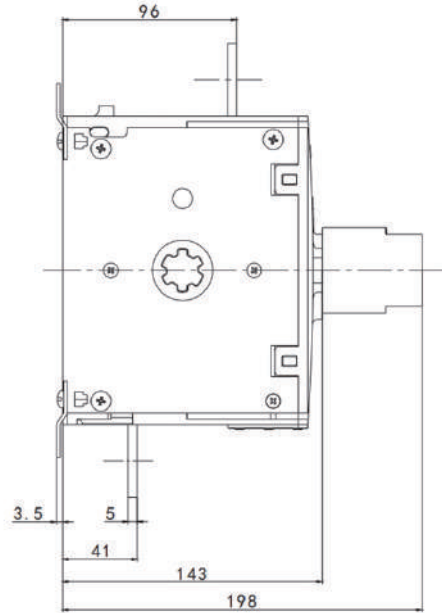
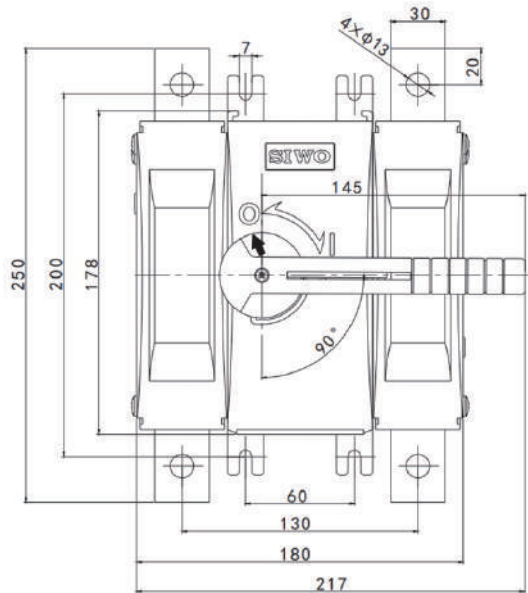
(4) In a medium that is not hazardous to explosion, and the medium does not have sufficient gas and conductive dust to corrode metals and destroy insulation; In the absence of rain Where snow strikes.

(5) Suitable for installation under environmental conditions of pollution class 3.

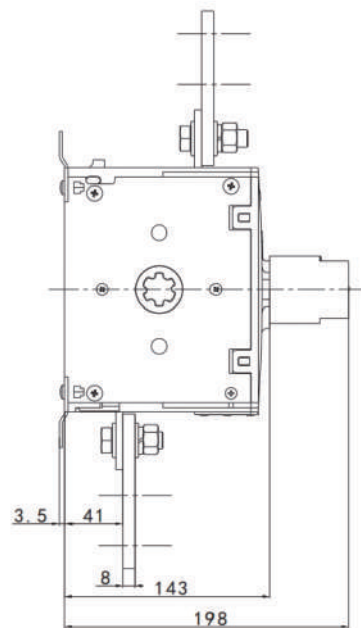
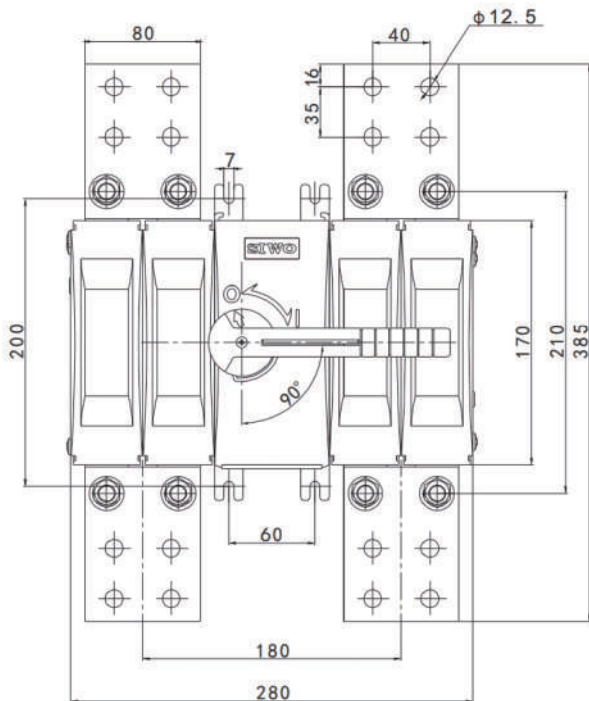
(6) Indoor use.

Product shape and installation size

Manual cabinet operation size: (unit: mm)

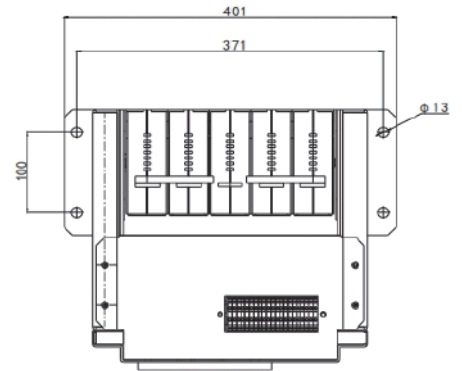
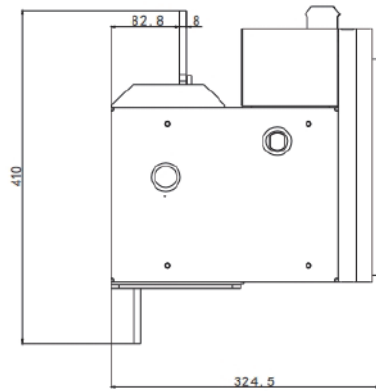
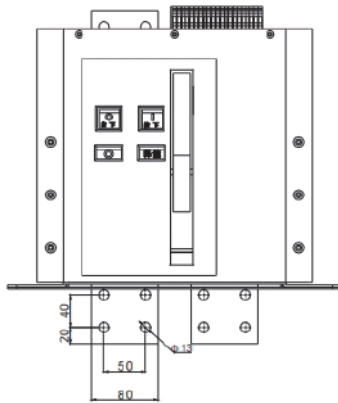


HCG5-500 (800) D/2

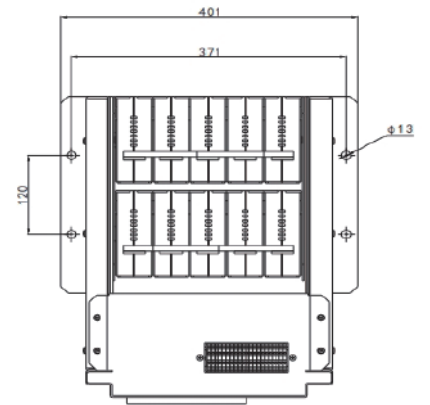
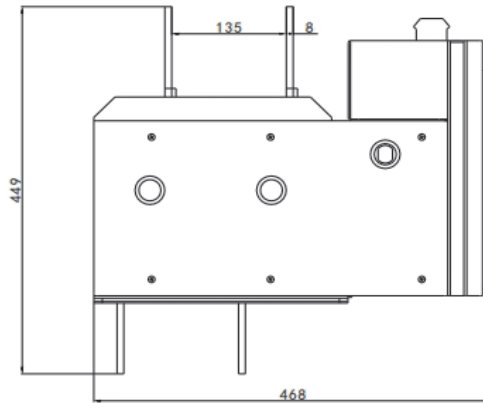
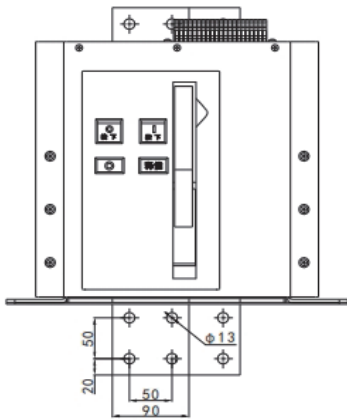


HCG5-1600D/2

Electric operating mechanism size: (unit: mm)

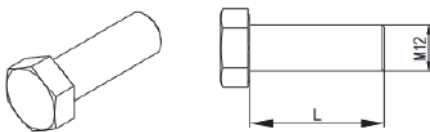


HCG5-1600D/2



HCG5-2500D/2

Copper bar wiring screw size:

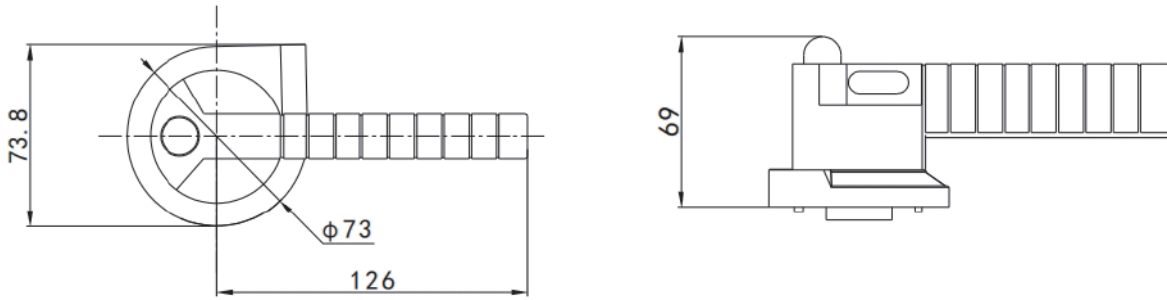


Current level	Copper bar wiring screws
HCG5-1600(2500)A	Allen bolts M12*35

Accessory wiring diagram

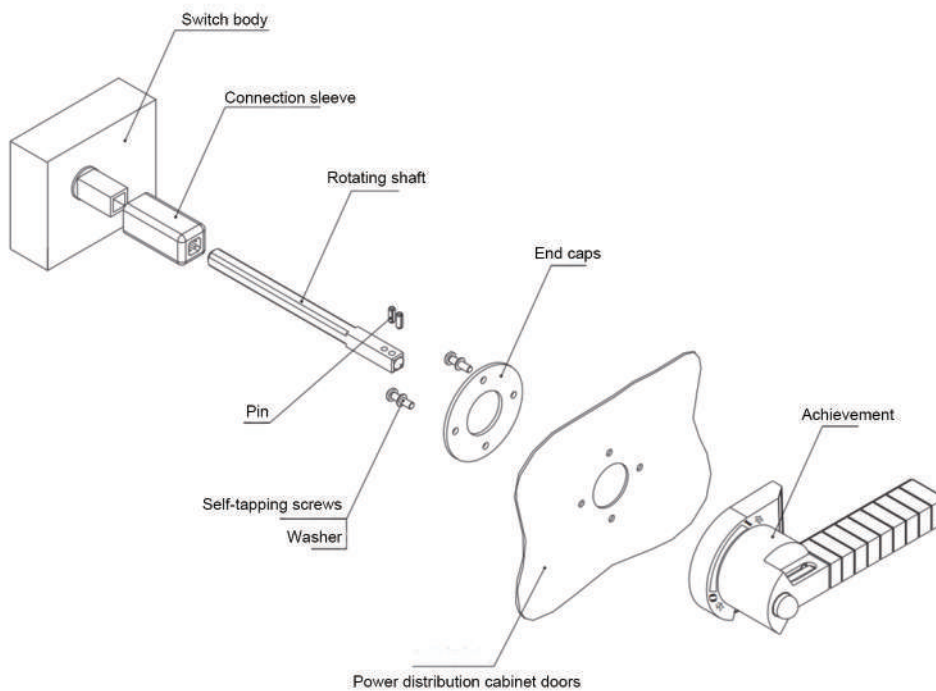
Terminal block function	Shunting	Close	Energy Storage	Undervoltage (optional)	Normally open Normally closed	Normally open Normally closed	Normally open Normally closed	Normally open Normally closed
Equip the interior								
External wiring	11 12	13 14	15 16 17	18 19	20 21 22	23 24 25	26 27 28	29 30 31

Installation size of the operating handle outside the cabinet: (unit: mm)



HCG5-500(800、1600) D/2

Schematic diagram of the operating mechanism outside the cabinet: (unit: mm)



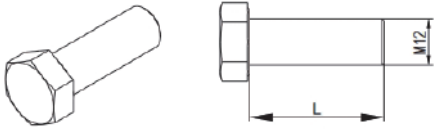
Applies to HCG5-500(800、1600) D/2

Extended-shaft installation dimensions for out-of-cabinet operation:

Product model	Standard length(mm)	Cross-sectional area
HCG5-500(800、1600) D/2	332	10×10

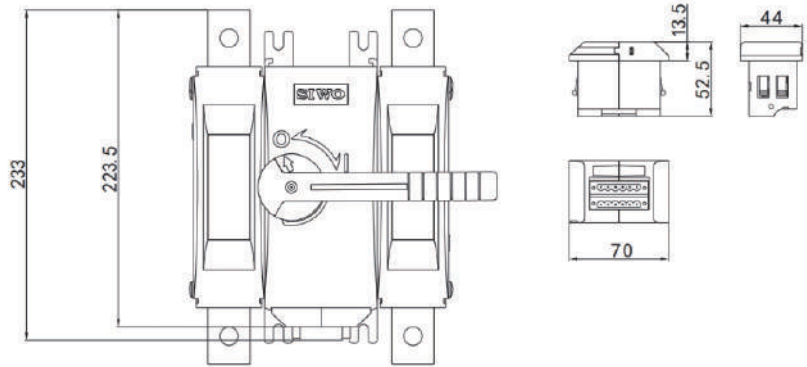
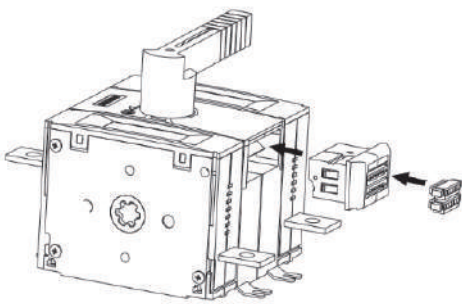
Note: The length of the extended shaft can be customized

Copper bar wiring screw size:

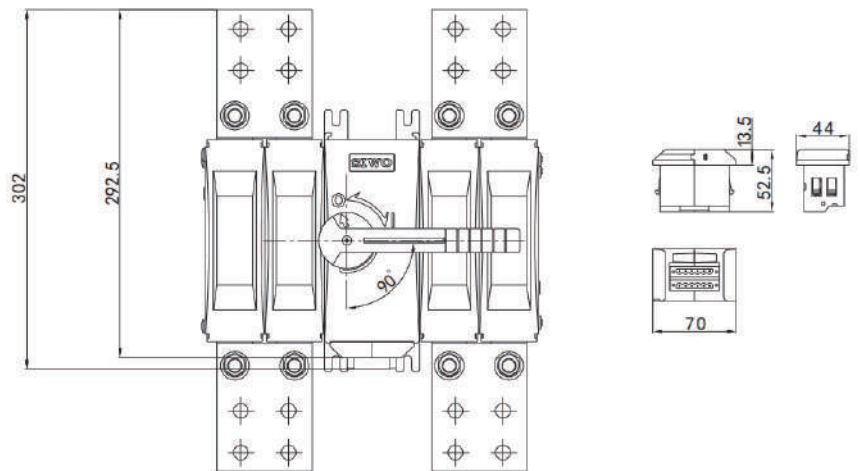
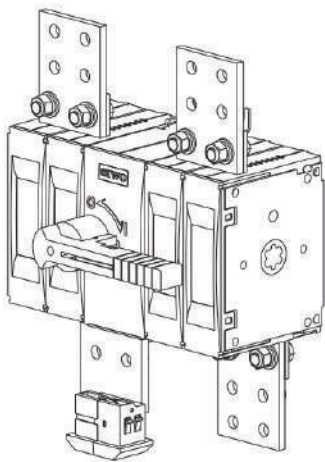


Current level	Copper bar wiring screws
HCG5-500(1600、2500)A	Allen bolts M12*35

Auxiliary contact shape and installation size: (unit: mm)

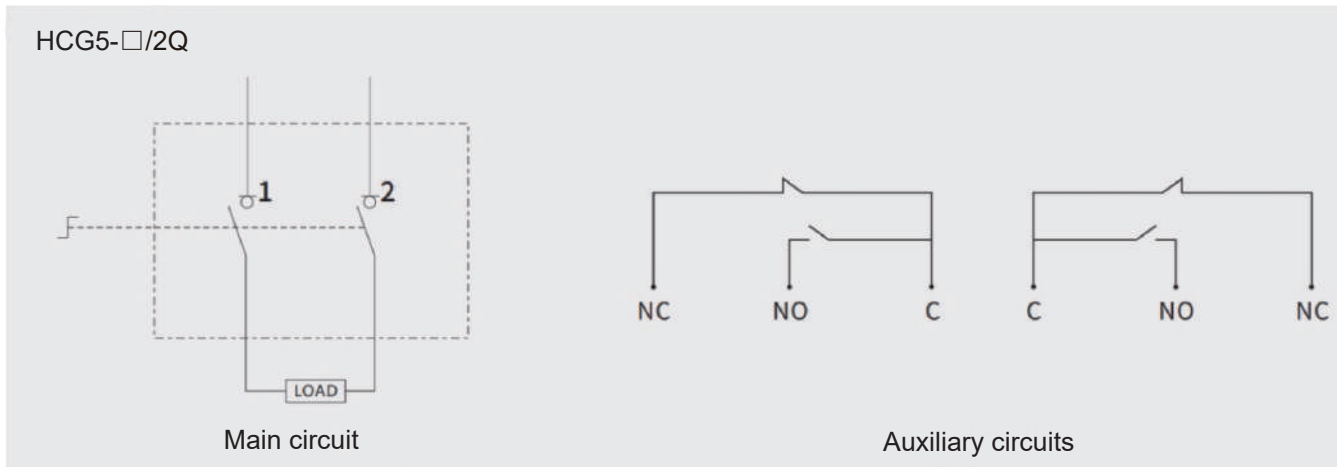


HCG5-500(800) D/2F44



HCG5-1600D/2F44

Wiring method

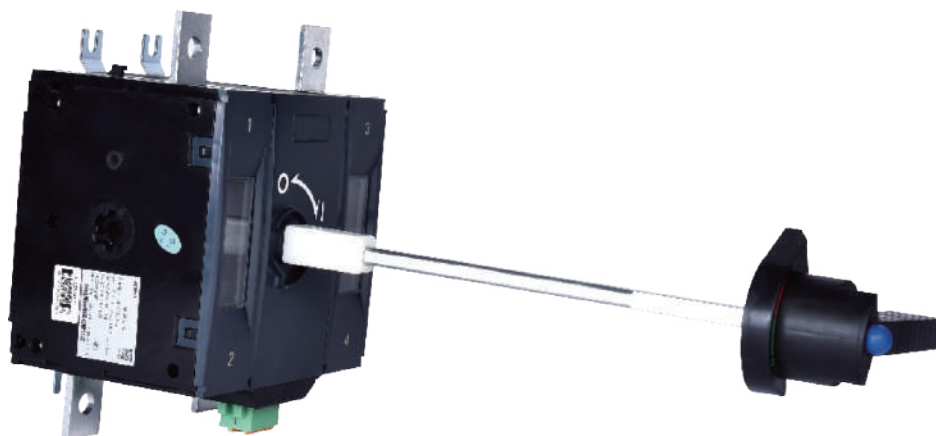


Installation method and installation location

Installation method: base plate installation;

Installation position: vertical installation and horizontal installation, vertical installation inclination is not more than 5°;

Status position: ← breaking position "O"; ↑ Closed position "I", two positions.



Wrap

Maximum packaging volume of the product

Model	Number	Number of boxes/boxes
HCG5-500D/2	1 set/box	4 boxes/carton
HCG5-800D/2	1 set/box	4 boxes/carton
HCG5-1600D/2	/	1 set/carton
HCG5-2500/2QDC	/	1 set/wooden case

Notes

- 1) Before installation, check whether the nameplate content meets the requirements for use, and confirm that the switch should be in an open state. Trigger switch operation handle, The handle points to "0", and the viewing window moving contact is obviously in the up state, and the switch is in the open state; The handle points to "I" to the viewing window. The mouth movement contact is in the lower hidden state, and the switch is closed, confirming that the handle opens and closes flexibly and smoothly.
- 2) The terminal blocks and wiring bare bus bars on the switch should be covered with an insulating layer to prevent short circuit between phases of the switch.
- 3) If the extended shaft and the handle hole of the external operation switch are different from the shaft, remember not to trigger the extended shaft to avoid damage to the internal parts, and should be adjusted. The switch position makes it coaxial.
- 4) The connecting wire should be fastened on the distribution cabinet frame, the switch should not bear the weight of the wire, and before tightening the wire, the busbar or cable terminal should be made. The plane is parallel to the plane of the switch terminal, and after connecting the wire and the switch terminal with bolts, the switch should not be subjected to various stresses.