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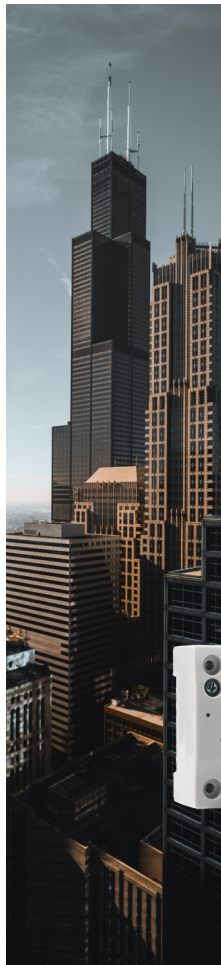


Isolation Switches

Instructions manual



HGL | HGLC | HGLZ



HGL and HGLC series isolation switches
HGLZ series double-throw transfer isolation switch

01 Applicable scope

HGL, HGLC series isolation switches, HGLZ series double-throw transfer isolation switches (hereinafter referred to as switches). Suitable for industrial enterprise distribution equipment with AC 50Hz, rated voltage up to 660V, DC voltage up to 440V, and resistive current (Ith) up to 3200A, used for infrequent connection and disconnection of circuits and electrical isolation (above 1000A only used for electrical isolation), widely used in distribution systems and automation systems in construction, power, petrochemical and other industries.

The HGLG side operated isolation switch adds a side operation mechanism based on the HGL front central operated isolation switch, suitable for making and breaking circuits and electrical isolation during side operation.

The HGLZ double-throw conversion isolation switch is composed of two HGL isolation switches stacked up and down or assembled side by side. It is suitable for switching dual power sources or switching between two load devices, as well as safety isolation.

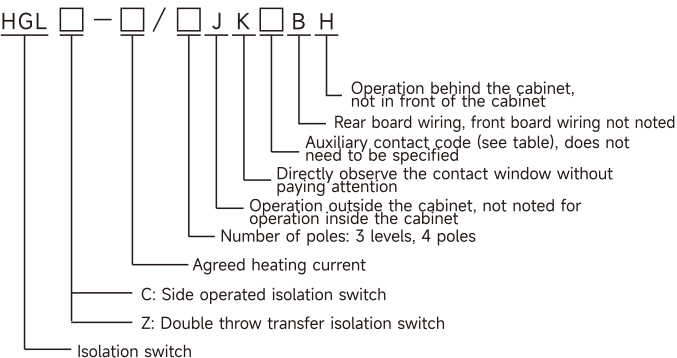
The switch has a beautiful appearance, novel and simple structure, convenient operation, and meets the IEC60947-3. GB14048.3 standard, which is the best choice for similar products!

02 Normal working conditions

- 1. Ambient air temperature: not higher than +40 °C, not lower than -5 °C, and the average temperature within 24 hours does not exceed +35 °C.
- 2. Altitude: The altitude of the installation site shall not exceed 2000m.
- 3. Relative humidity: When the highest ambient temperature is +40 °C, the relative humidity of the air shall not exceed 50%. Higher relative humidity can be allowed at lower temperatures (such as up to 90% at +20 °C). However, occasional condensation on the surface of the switch due to temperature changes should be considered.

- 4. Environmental pollution level: Level 3.
- 5. Installation category: Class II and IV.
- 6. Installation conditions: The switch should be installed vertically in a place without significant vibration and impact, as well as in a medium without explosion risk, and there should be no gas or dust in the medium that is sufficient to corrode metal and damage insulation.
- 7. For use under abnormal working conditions, please consult with our company.

03 Model and Meaning



One normally open and one normally closed	11	1NO+1NC	Applicable to HGL (C, Z)
Two normally open and two normally closed	22	2NO+2NC	Applicable to HGL (C, Z)
Four normally open and four normally closed	44	4NO+4NC	Only applicable to HGLZ

04 Structural Features

1. The switch employs a spring-stored energy, instant-release mechanism for accelerated opening and closing, along with a parallel double-breakpoint contact structure, significantly improving the electrical and mechanical performance of the switch.

2. The switch is made of glass fiber-reinforced unsaturated polyester molding material and a manual operating handle, providing high dielectric performance, protective capability, and reliable operational safety.

3. The switch is available in both 3-pole and 4-pole configurations (3-pole with optional switchable neutral pole).

4. There is a marking window on the front face of the switch, indicating the open and closed status of the contacts. A rear observation window can be provided as needed for direct monitoring of the contact status from behind, ensuring reliable and safe switch operation.

5. The operating handle can be directly mounted on the switch (referred to as "in-cabinet operation") or operated from outside the distribution cabinet by extending the shaft (referred to as "external cabinet operation"), providing convenience in operation.

6. Auxiliary normally open (NO) and normally closed (NC) contacts can be provided as required, along with dedicated mounting bases and front and rear panel wiring methods, to meet various user needs.

7. When in the "0" position, two to three locks can be used to secure the handle to prevent accidental operation.

05 Main Technical Parameters

1. The main technical parameters of the HGL series isolation switch are detailed in Table 1.

2. The key parameters of isolation switches, including side operation, external cabinet operation, rear cabinet operation, rear panel wiring, and direct observation window for contact status, all correspond to those of the HGL series.

3. The main parameters of the HGLZ dual-throw transfer isolation switch are aligned with those of the HGL series.

Table 1: Main Technical Parameters of HGL Series Isolation Switch

Rated Thermal Current Ith (A)			160	250	400	630	1000	1250	1600	2500	3200
Rated Insulation Voltage UI			800V		1000V						
Dielectric Strength			3000V		3500V						
Rated Impulse Withstand Voltage Uimp			8KV		12KV						
Rated Operational Voltage Ue			AC400 660V								
Rated Frequency			50Hz								
Utilization Category			AC-21 22 23								
Rated Operational Current Ie(A)	AC 400V	AC-21	160	250	400	630	1000	1250	1600	2500	3200
		AC-22	160	250	400	630	1000	1250	1600	2500	3200
		AC-23	160	250	400	630	800	1000	1250	2000	2500
	AC 660V	AC-21	160	250	400	630	1000	1250	1600	2500	3200
		AC-22	100	200	315	400	630	630	800	1000	1250
		AC-23	63	125	200	250	400	400	500	/	/
Rated Making Capacity(A Rms)			10Ie								
Rated Breaking Capacity(A Rms)			8Ie								
Rated Short-Circuit Making Capacity Icm(kA Rms)			12	17	30	40	70			100	
1S Short-Time Withstand Current Icw(kA Rms)			10	12	20	25	50			70	
Mechanical Life (Times)			5000		3000		2000			1000	
Electrical Life (Times)			1000		600		300			/	
Operating Torque (N·m)			6.5	10	15		27			50	
Weight kg (excluding handle)		3 Pole	1.1	1.7	4.0	4.6	11.1	13.1	13.9	27.6	28.6
		4 Pole	1.3	2.2	5.0	5.8	14.7	17.4	18.3	36.5	37.8
The main parameters of auxiliary switches			50Hz AC-15 230V 3A								

06 External Appearance and Installation Dimensions

1. Dedicated Mounting Base (Refer to Figure 1, Table 2)

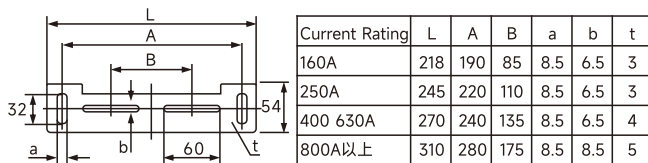


Figure 1: Dedicated Mounting Base

Table 2: Dimensions of Dedicated Mounting Base

2. In-Cabinet Operating Handle (Refer to Figure 2)

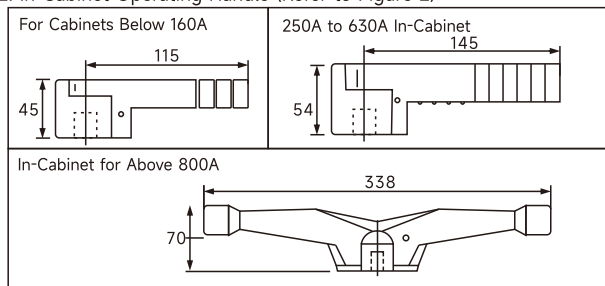


Figure 2: In-Cabinet Operating Handle

3. Panel Cutout Dimensions and External Cabinet Operating Handle (Refer to Figures 3 and 4)

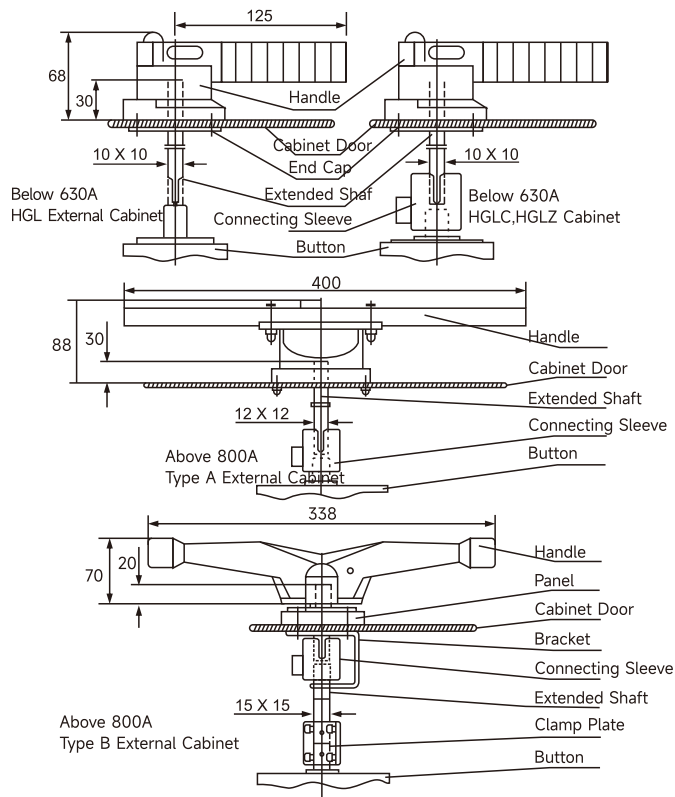
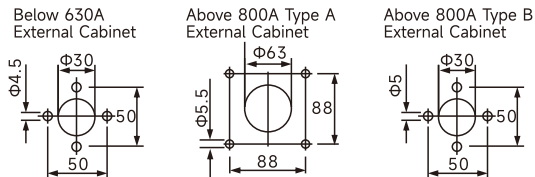


Figure 4: External Cabinet Operating Handle

Dimensions of HGL Series Isolation Switch (Refer to Table 3-4, Figures 5-8)

Table 3: Dimensions of HGL-160~1600A Isolation Switch

HGL		External Dimensions					Installation Dimensions					Terminal Dimensions				
		A	B	C	D	H	a	b	c	d	e	R	S	T	Y	M
-160	/3	140	135	92	36	85	120	65	5.5	27	85	20	10	3.5	25	8
	/4	170	135	92	36	85	150	65	5.5	27	85	20	10	3.5	25	8
-250	/3	180	170	102	50	110	160	90	5.5	35	115	25	15	3.5	25	10
	/4	230	170	102	50	110	210	90	5.5	35	115	25	15	3.5	25	10
-400	/3	230	240	135	65	160	210	140	7	50	145	32	17	3.5	37	10
	/4	290	240	135	65	160	270	140	7	50	145	32	17	5	37	10
-630	/3	230	260	135	65	160	210	140	7	50	145	40	20	5	37	12
	/4	290	260	135	65	160	270	140	7	50	145	40	20	6	37	12
-800	/3	328	312	170	120	200	303	175	9	72	160	60	20	6	48	12
	/4	498	312	170	120	200	353	175	9	72	185	60	20	8	48	12
-1000	/3	378	312	170	120	200	353	175	9	72	185	80	20	8	48	12
	/4	498	312	170	120	200	473	175	9	72	249	80	20	8	48	12
-1250	/3	378	356	170	120	200	353	175	9	72	185	80	20	8	48	12
	/4	498	356	170	120	200	473	175	9	72	249	80	20	8	48	12
-1600	/3	378	356	170	120	200	353	175	9	72	185	80	20	10	49	12
	/4	498	356	170	120	200	473	175	9	72	249	80	20	10	49	12

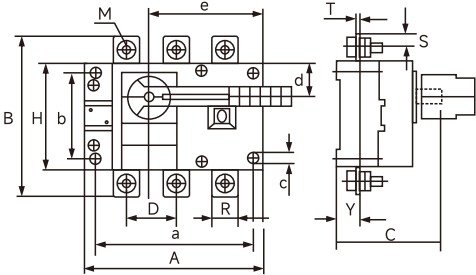


Figure 5: HGL-160~630A Isolation Switch

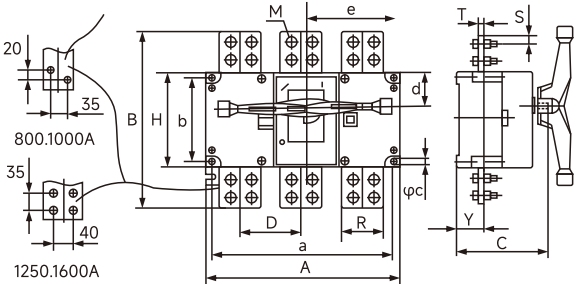


Figure 6: HGL-800~1600 Isolation Switch

Table 4: Dimensions of HGL-2500 3200A Isolation Switch

HGL-		External Dimensions		Installation Dimensions			Terminal Dimensions			
		A	B/B*	a	b	e	R/R*	T/T*	Y/Y*	Z/Z*
2500	/3	378	356/502	350	230	185	80/80	8/12	98/85	88/115
	/4	498	356/502	470	230	249	80/80	8/12	98/85	88/115
3200	/3	378	356/502	350	230	185	80/100	10/15	99/83	88/120
	/4	498	356/502	470	230	249	80/100	10/15	99/83	88/120

Note: Dimensions with "*" indicate dimensions with connecting copper plates.

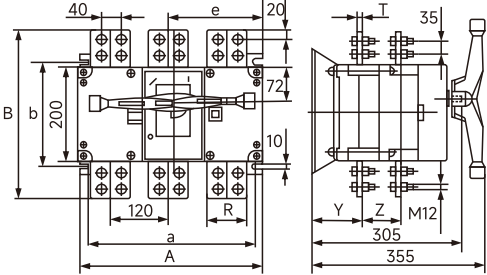


Figure 7: HGL-2500 to 3200A (Without Connecting Copper Plates) Isolation Switch.

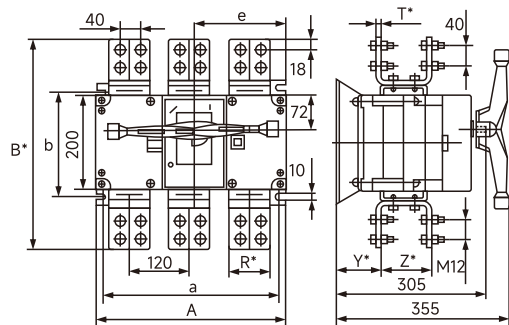


Figure 8: HGL-2500 to 3200A
With Connecting Copper Plates) Isolation Switch
5、Dimensions of HGL/H Series Rear Cabinet Operating
Isolation Switch (Refer to Table 5-6, Figures 9-10):

Table 5: Dimensions of
HGL-160~630A/H

HGL/H		Installation Dimensions			
		a	b	c	Y
-160A	/3	120	95	7	52
	/4	150	95	7	52
-250A	/3	160	115	9	60
	/4	210	115	9	60
-400A	/3	210	180	11	80
	/4	270	180	11	80
-630A	/3	210	180	11	80
	/4	270	180	11	80

Note: All other dimensions
correspond to those of the HGL series

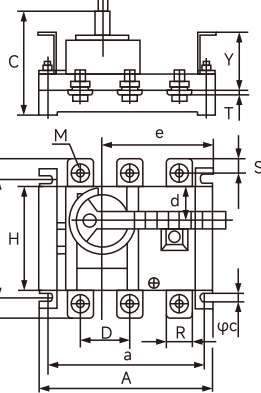
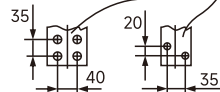


Figure 9: HGL-160~630A/H
Rear Cabinet Operation

Table 6: HGL-800~1600A/H Dimensions

HGL/H-		Mounting Dimensions			
		a	b	c	Y
800A	/3	300	230	10	90
1000A	/3	350	230	10	90
	/4	470	230	10	90
1250A	/3	350	230	10	90
	/4	470	230	10	90
1600A	/3	350	230	10	89
	/4	470	230	10	89

Note: The rest of the dimensions
correspond to HGL.



1250.1600A

800.1000A

Fig.10:HGL-800~1600A/H cabinet rear operation

6. HGL/B series behind-the-plate wiring disconnecting switch
dimensions (see Table 7, Figs. 11-12)

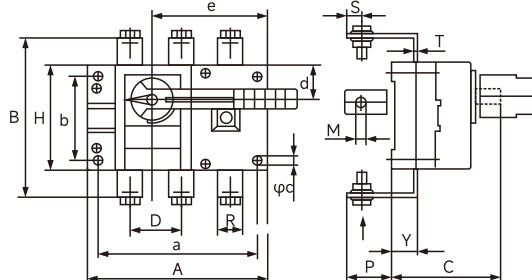


Fig.11:HGL-160~630A/B behind board wiring disconnect switch

Table 7: HGL-160~1600A/B Dimensions

HGL/B-	Terminal size					HGL/B-	Terminal size				
	R	S	T	Y	P		R	S	T	Y	P
160A	20	10	3.5	25	70	800A	60	20	8	48	108
250A	25	15	3.5	25	75	1000A	65	20	8	48	108
400A	32	17	5	37	84	1250A	80	20	8	48	108
630A	40	20	6	37	84	1600A	80	20	10	49	108

Note: The rest of the dimensions correspond to HGL.

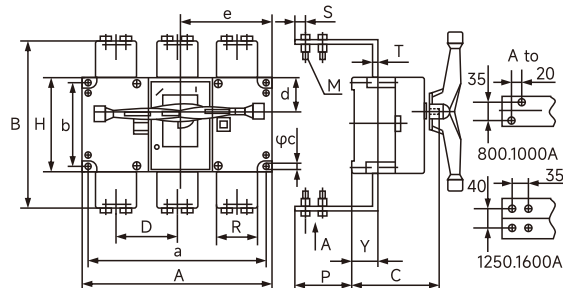


Fig.12, HGL-800~1600A/B behind board wiring disconnect switch
7. Dimensions of HGLC series side-operated disconnecting switches
(see Table 8-9 and Figs. 13-16)

Table 8: HGLC-160~1600A Side Operated Disconnect Switches Dimensions

HGLC		Dimensions						Mounting size				Terminal size				
		A	B	C	D	E	H	a	b	c	e	R	S	T	Y	M
160A	/3	195	135	124	36	140	85	120	95	7	20	20	10	3.5	52	8
	/4	225	135	124	36	170	85	150	95	7	20	20	10	3.5	52	8
250A	/3	235	170	132	50	180	110	160	115	7	20	25	15	3.5	60	10
	/4	285	170	132	50	230	110	210	115	9	20	25	15	3.5	60	10
400A	/3	300	240	164	65	230	160	210	180	11	35	32	17	5	80	10
	/4	360	240	164	65	290	160	270	180	11	35	32	17	5	80	10

Continued Table 8: HGLC-160~1600A Side Operated Disconnect Switches Dimensions

HGLC-		Dimensions						Mounting size				Terminal size				
		A	B	C	D	E	H	a	b	c	e	R	S	T	Y	M
160	/3	300	260	164	65	230	160	210	180	11	35	40	20	6	80	12
	/4	360	260	164	65	290	160	270	180	11	35	40	20	6	80	12
800	/3	423	312	232	120	328	200	300	230	10	40	60	20	8	98	12
1000	/3	473	312	232	120	378	200	350	230	10	40	60	20	8	98	12
	/4	593	312	232	120	498	200	470	230	10	40	60	20	8	98	12
1250	/3	473	356	232	120	378	200	350	230	10	40	80	20	8	98	12
	/4	593	356	232	120	498	200	470	230	10	40	80	20	8	98	12
1600	/3	473	356	232	120	378	200	350	230	10	40	80	20	10	99	12
	/4	593	356	232	120	498	200	470	230	10	40	80	20	10	99	12

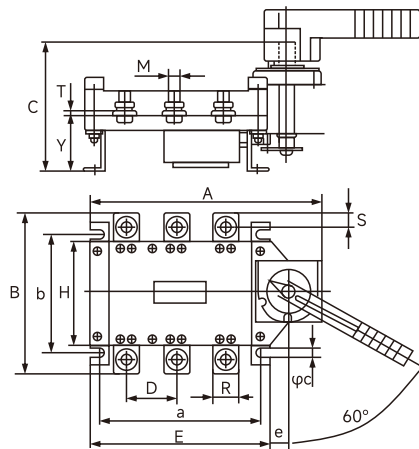


Fig.13: HGLC-160~630A side operation disconnecting switch

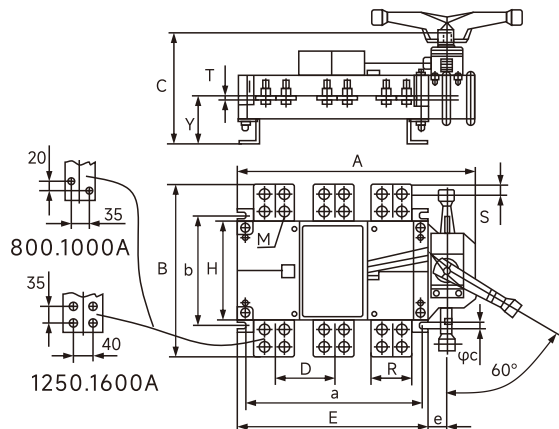


Fig.14: HGLC-800~1600A side operation disconnecting switch

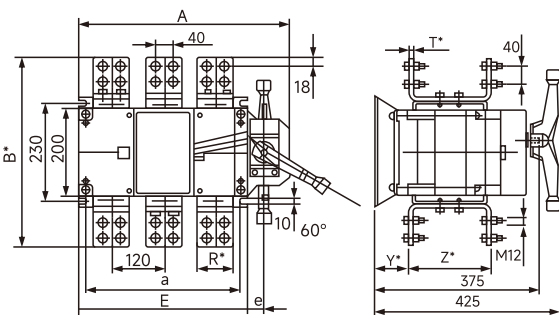


Fig.15:HGLC-2500/3200A (with connecting copper plate) side-operated disconnecting switch

Table 9: HGLC-2500.3000A side-operated disconnecting switch dimensions

HGLC-		Outline Mounting Dimensions					Terminal Size			
		A	B/B*	E	a	e	R/R*	T/T*	Y/Y*	Z/Z*
2500A	/3	473	356/502	378	350	40	80/80	8/12	98/85	88/115
	/4	593	356/502	498	470	40	80/80	8/12	98/85	88/115
3200A	/3	473	356/502	378	350	40	80/100	10/15	99/83	88/120
	/4	593	356/502	498	470	40	80/100	10/15	99/83	88/120

Note: The band * size refers to the size of the band connecting the copper plate

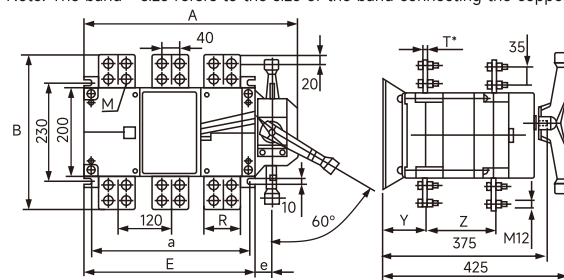


Figure 16: HGLC-2500.3000A (without connecting copper plate) side-operated disconnecting switch

8.HGLZ series double-throw change-over disconnect switch dimensions (see Table 10-11, Figure 17-20)

Table 10: HGLZ-160~1600A double-throw changeover disconnect switch dimensions

HGLC-		Dimensions					Mounting size					Terminal size				
		A	B	C	D	E	H	a	b	c	e	R	S	T	Y	M
160A	/3	195	135	196	36	140	85	120	65	5.5	20	20	10	3.5	72	8
	/4	225	135	196	36	170	85	150	65	5.5	20	20	10	3.5	72	8
250A	/3	235	170	215	50	180	110	160	90	5.5	20	25	15	3.5	82	10
	/4	285	170	215	50	230	110	210	90	5.5	20	25	15	3.5	82	10
400A	/3	300	240	278	65	230	160	210	140	7	35	32	17	5	114	10
	/4	360	240	278	65	290	160	270	140	7	35	32	17	5	114	10
630A	/3	300	260	278	65	230	160	210	140	7	35	40	20	6	114	12

Table 10: HGLZ-160~1600A double-throw changeover disconnect switch dimensions

HGLC-	Dimensions						Mounting size				Terminal size					
	A	B	C	D	E	H	a	b	c	e	R	S	T	Y	M	
630	/4	360	260	278	65	290	160	270	140	7	35	40	20	6	114	12
800	/3	423	312	380	120	328	200	303	175	9	40	60	20	8	156	12
1000	/3	473	312	380	120	378	200	353	175	9	40	60	20	8	156	12
	/4	593	312	380	120	498	200	473	175	9	40	60	20	8	156	12
1250	/3	473	356	380	120	378	200	353	175	9	40	80	20	8	156	12
	/4	593	356	380	120	498	200	473	175	9	40	80	20	8	156	12
1600	/3	473	356	380	120	378	200	353	175	9	40	80	20	10	156	12
	/4	593	356	380	120	498	200	473	175	9	40	80	20	10	156	12

Note: Dimension Y corresponds to that of HGLC

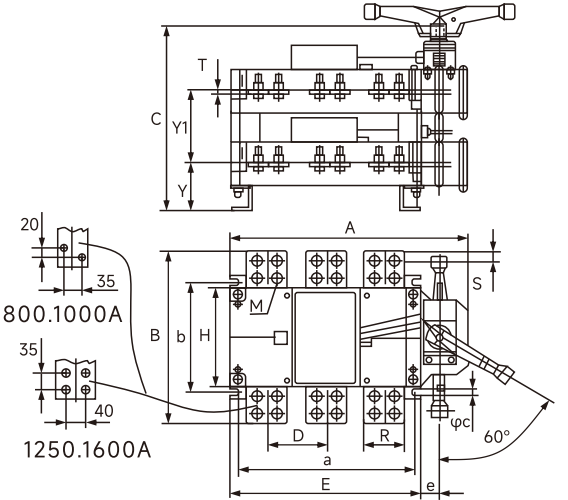
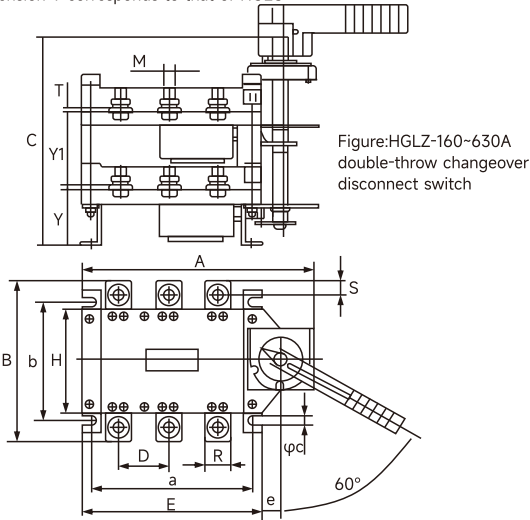


Figure 18: HGLZ-800~1600A double-throw transfer isolation switch

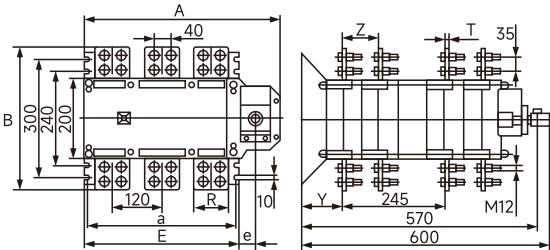


Figure 19: HGLZ-2500.3200A (without connecting steel plate) double-throw transfer isolation switch

Table 11: Dimensions of HGLZ-2500.3200A double-throw transfer isolation switch

HGLZ-		Dimensions					Terminal size			
		A	B/B*	E	a	e	R/R*	T/T*	Y/Y*	Z/Z*
2500A	/3	473	356/502	378	350	40	80/80	8/12	98/85	88/115
	/4	593	356/502	498	470	40	80/80	8/12	98/85	88/115
3200A	/3	473	356/502	378	350	40	80/100	10/15	99/83	88/120
	/4	593	356/502	498	470	40	80/100	10/15	99/83	88/120

Note: Dimensions with "*" refer to the dimensions of the connecting copper plate

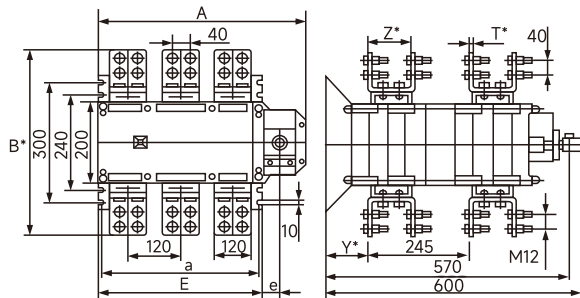


Figure 20: HGLZ-2500.3200A (with connecting copper plate) double-throw transfer isolation switch

07 Installation instructions

1. HGL-630A It's installation instructions for operating switches in cabinets below

As shown in 21, install the switch vertically on the installation plate in the switch cabinet, and keep the switch in the off "0" position; insert the expansion block into the hole of the switch square shaft, put the handle on the switch square shaft, and keep the handle in a horizontal position; then use self-tapping screws to screw into the expansion block from the handle hole.

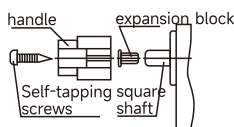


Figure 21

2. Installation instructions for operating switches in HGL-800A above, HGLC series, and HGLZ series cabinets

As shown in Figure 22, fix the switch vertically on the mounting plate inside the switch cabinet and keep the switch in the off "0" position; Place the handle on the square axis of the switch and place it in a horizontal position; Then fix the handle on the switch square shaft with a flat head screw and tighten the screw.

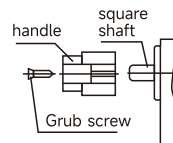


Figure 22

3. Installation instructions for external operating switches below HGL-630A

(1) As shown in Figure 23, fix the switch vertically on the mounting plate inside the switch cabinet and place it in the off "0" position. Then measure the distance L from the top of the switch square axis to the inner surface of the cabinet door.

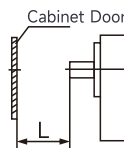


Figure 23

(2) As shown in Figure 24; After measuring the length of (L+66)mm at the pin end of the extended shaft, saw off the excess length.

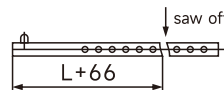


Figure 24

(3) As shown in Figure 25: If the cabinet door interlocking is not required (i.e. when the switch is closed, the cabinet door cannot be opened; when the cabinet door is open, the switch cannot be closed), use a pliers to pull out the black cylindrical pin at the extension shaft pin end. If the cabinet door interlocking is required, it does not need to be pulled out. Then insert the extended shaft into the hole of the switch square shaft and fully insert it, and then tighten the set screw in the switch square shaft.

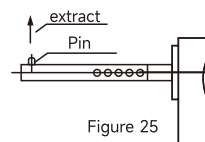


Figure 25

(4)As shown in Figure 26: Use a hammer to lightly tap the contact point between the cabinet door and the top of the extension shaft from outside the cabinet to determine the drilling center, and drill holes from the inside of the cabinet door outward at the drilling center $\Phi 6$, and re-expand the hole $\Phi 30$.

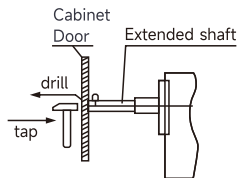


Figure 26

(5)As shown in Figure 27, clamp the protruding center part of the disc end cover onto $\Phi 3$ drill holes of the cabinet door. Drilling holes 4- $\Phi 4.5$ in the left and right horizontal directions of the cabinet door and the vertical direction of the upper and lower, and position them with the 4 small holes of the end cover, then use a hammer to knock off the protruding center part of the end cover.

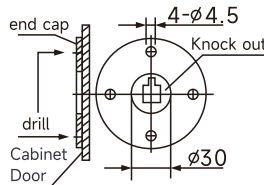


Figure 27

(6)As shown in Figure 28, use the two self tapping screws and flat washers attached with the machine to fix the disc end cover (on the inner side of the cabinet door) and handle (on the outer side of the cabinet door) to the opening of the cabinet door. During installation, the handle should be in a horizontal position and indicate "0" position.

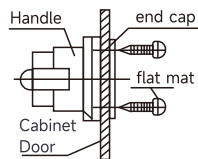


Figure 28

4. Installation instructions for external operating switches HGLC and below HGLZ-630A

(1)As shown in Figure 29, fix the switch vertically on the mounting plate inside the switchgear and place it in the disconnected "0" position; Then use flat head screws to fix the connecting sleeve on the switch square shaft, and make the convex rib point towards the "0" position of the switch. Then measure the distance L from the top of the connecting sleeve to the inner surface of the cabinet door.

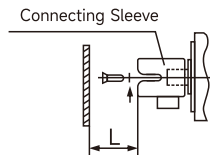


Figure 29

(2)As shown in Figure 30, after measuring the length of (L+48) mm at the rivet pin end of the extended shaft, the excess part will be sawn off.

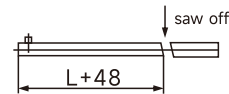


Figure 30

(3)As shown in Figure 31: If cabinet door interlocking is not required, the cylindrical pin at the rivet pin end of the extended shaft can be ground flat; If cabinet door interlocking is required, there is no need to grind it flat. Then insert the extension shaft into the hole of the connecting sleeve, and fasten the switch square shaft with the connecting sleeve and extension shaft using two hexagonal head bolts.

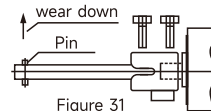


Figure 31

(4) (5) (6) Corresponding to the operation outside the cabinet below HGL-630A.

5. Installation instructions for operating switches outside cabinets of HGL, HGLC, above HGLZ-800A (Type A)

(1) As shown in Figure 32, fix the switch vertically on the mounting plate inside the switchgear and place it in the disconnected "0" position; Then use flat head screws to fix the connecting sleeve on the square shaft of the switch, and make the convex rib point towards the "0" position of the switch; Measure the distance L from the top of the connecting sleeve to the inner surface of the cabinet door

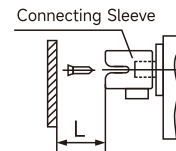


Figure 32

(2)As shown in Figure 33, after measuring the length of (L+50) mm at the rivet pin end of the extended shaft, cut off the excess part.

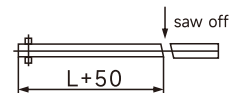


Figure 33

(3) As shown in Figure 34: If cabinet door interlocking is not required, the cylindrical pin at the rivet pin end of the extended shaft can be ground flat; If cabinet door interlocking is required, there is no need to grind it flat. Then insert the extension shaft into the hole of the connecting sleeve and fasten the switch square shaft with the connecting sleeve and extension shaft using two hexagonal head bolts.

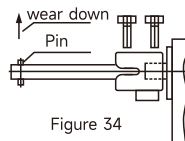


Figure 34

(4) As shown in Figure 35: Use a hammer to lightly tap the contact point between the cabinet door and the top of the extension shaft from the outside of the cabinet to determine the drilling center, and drill holes $\Phi 6$ from the inside of the cabinet door out at the drilling center, and enlarging hole $\Phi 63$.

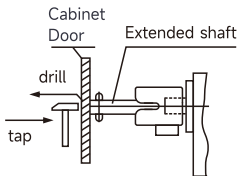


Figure 35

(5) As shown in Figure 36: Drill 4 holes of $\Phi 5.5$ on the cabinet door panel with centered around $\Phi 63$; Screw out the four nuts on the handle again, align and insert the four screws on the handle from the outside of the cabinet door to 4- $\Phi 5.5$ holes, and make the handle at the horizontal indication "0" position; Then put on and tighten the four nuts

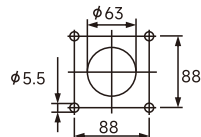


Figure 36

6. Installation instructions for operating switches out of cabinets HGL-800A above (Type B)

(1) As shown in Figure 37, fix the switch vertically on the mounting plate inside the switchgear and place it in the "0" position when disconnected; Measure the distance L from the top of the switch square axis to the inner surface of the cabinet door.

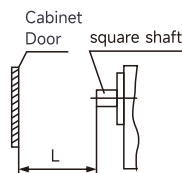


Figure 37

(2) As shown in Figure 38, screw the threaded end of the positioning shaft into the screw hole of the extended shaft and tighten it in place. Measure the length of (L) on the extended shaft along with the positioning shaft, and then cut off the excess length.

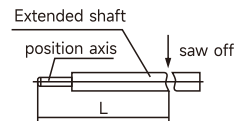


Figure 38

(3) As shown in Figure 39: Connect the extended shaft with the switch square shaft using a positioning clamp and accessory bolts, and tighten the positioning nails; Adjust the positioning axis so that its top is in contact with the cabinet door, and use a hammer to lightly tap the location from outside the cabinet to determine the drilling center; Then remove the positioning shaft and drill a hole of $\Phi 6$ from the inside of the cabinet door out at the center of the hole and then enlarge hole to $\Phi 30$.

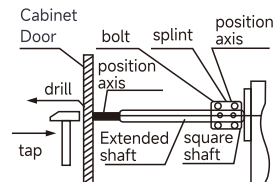


Figure 39

(4) As shown in Figure 40, use the shorter flat head screw in the attachment to fix the connection (aluminum) sleeve on the extension shaft, and make the convex rib point horizontally to the left (i.e. switch "0" position); Thread the panel components into the cabinet door $\Phi 30$ holes, and make the same direction of the indicator in the panel consistent with the direction of the protruding ribs in the connecting sleeve; Then close the cabinet door and drill 3- $\Phi 5$ holes in the left, right, and upper positions of the panel.

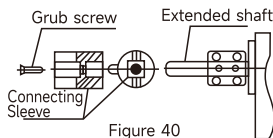
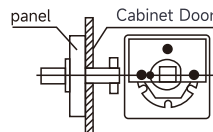


Figure 40



(5) As shown in Figure 41, use the three longer flat head screws in the attachment to install the panel component (on the outer side of the cabinet door) and the U-shaped bracket (on the inner side of the cabinet door) at the opening of the cabinet door, and make the U-shaped opening of the U-shaped bracket face left when using the right-hand door and right when using the left-hand door.

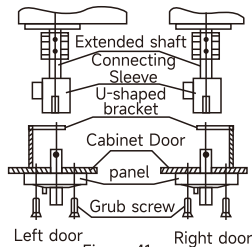


Figure 41

(6) As shown in Figure 42: Paste the identification plate on the panel and stick it firmly and upright; Then place the handle on the square axis of the panel and point it towards the "0" position marked; Then secure the handle to the panel square shaft with flat head screws and tighten the screws.

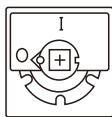


Figure 42

7. The operation behind the cabinet, wiring behind the board, direct observation of contact windows, and other isolation switches are all installed and used in accordance with the HGL cabinet inside and outside.

08 Usage and Maintenance

1. The switch should be installed vertically and the rated current of the switch should be selected based on the capacity of the electrical equipment; Before installing the switch, it is necessary to check whether the switch nameplate meets the usage requirements and confirm that the switch is in a disconnected state before installation, that is, the switch indicates "0" position.

2. The wiring terminals and copper bars of the switch should be wrapped with insulation to prevent short circuits between phases of the switch.

3. If the extension axis of the external operating switch is different from the handle hole on the cabinet door, the extension axis should not be pulled to avoid damaging the internal parts of the switch. Instead, the position of the switch should be adjusted to make it coaxial.

4. The operating handle and mechanism of the external operating switch have interlocking protection function: that is, when the switch is closed, the cabinet door cannot be opened; When the cabinet door is open, the switch cannot be closed. If interlocking is not required, grind the cylindrical pin on the extended shaft or the convex rib on the connecting aluminum sleeve flat.

5. Rotate the operating handle clockwise to close the switch; Rotate the operating handle counterclockwise to disconnect the switch. Before each operation, attention the indicating status of the switch: when in the breaking position "0", the switch can only be operated clockwise to make it closed; when in the closing position "1", the switch can only be operated counterclockwise to make it open

6. To prevent accidental operation by unrelated personnel, regardless of the position of the switch, a padlock can be used to lock it, and the handle cannot be rotated again.

7. The contacts of the switch should be regularly inspected and debris such as dust and oil should be promptly cleaned; The friction area of the operating mechanism should be regularly oiled to make its movement flexible and extend its service life; If the switch is severely damaged, it must be immediately stopped from use

09 Ordering instructions

Please specify the model, specifications, and order quantity of the switch in detail when ordering

For example:	HGL-160/4	10 units
	HGL-250/3J	5 units