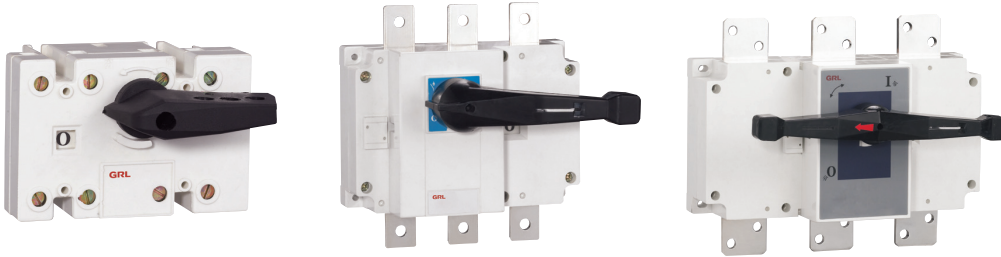


HGL series Load isolation switch



Model & Meaning

H GL □ - □A / □ JK □ B H
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Code of company.
- ② Code of load isolation switch.
- ③ Conventional thermal current.
Z tands for change-over load isolation switch (Z1-outlet, Z2-inlet)
C tands for side operated load isolation switch.
- ④ Number of poles:
3 poles, 4 poles (3 poles+on andoff neutral pole)
- ⑤ Operation outside, no note for front operation.
- ⑥ The window for direct observing the contact, do not mark without need.
- ⑦ Functional code of auxiliary contact (as show in the table), do not mark without need.
- ⑧ The connection behind the board. Connection in front of board is not marked.
- ⑨ Operation behind the board, do not mark without need.

One NO One NC	F11	F1NO+F1NC
Two NO Two NC	F12	F2NO+F2NC

Application scope

HGL series load isolation witch mainly suitable for AC 50Hz, rated voltage to 660V, DC rated voltage up to 440V, rated current up to 3,150A. The switch is used in the infrequent making and breaking circuit.

Example of model selection

HGLZ2-160A/4Z₂JF₁₁~380V In 125A

Change over load isolation switch, inlet, AC rated voltage 380V, Conventional thermal current 160A, rated current 125A, 4 poles, operation outside the board, auxiliary contact NO+NC.

Characteristies of products

- ※ The elastic-accumulating accelerating mechanism for instant release realizes the rapid making and breaking (13.8m/s), having no relation ship with the speed of the operating handle, and increasing greatly the capability of extinguishing electric arc.
- ※ The shell made of unsaturated polyester resin reinforced by glass fibre possesses excellent perform ance of flame resistant, dielectric performance, safe operation, resist carbonic performance and resist impact performance.
- ※ Parallel double gap contact possesses self cleaning functions.
- ※ Allthe contact materials are copper alloy plated with silver, and possess two separation contact surfaces.Large clearance of insulation.
- ※ Be on "O" , the products can lock the handle with three locks at the same time and thus can avoid error operation.

HGL series

Load isolation switch

Principal technical parameter

Table 1

Conventional thermal current I _{th} (A)		63A		100A		160A		250A		
Rated current I _n (A)		40	63	80	100	125	160	200	250	
Rated insulation voltage U _i (V) (installation type IV)		690	690	690	690	690	690	690	690	
Dielectric strength (V)		5000	5000	5000	5000	5000	5000	5000	5000	
Rated surge-resistant voltage U _{imp} kV (installed category IV)		6	6	6	6	6	6	6	6	
Rated working current I _e (A)	380V	AC-21B	40	63	80	80	125	160	200	250
		AC-22B	40	63	80	80	125	160	200	250
		AC-23B	40	50	80	80	125	160	200	250
	660V	AC-21B	40	50	80	80	125	160	200	250
		AC-22B	32	32	50	50	125	160	160	160
		AC-23B	25	25	40	40	80	80	100	125
Motor power P (kW)	380V	18.5	25	40	40	63	80	100	132	
	660V	22	22	33	33	75	75	90	110	
Rated short-time withstand current I _{cw} (kA Rms) 0.1s/1s		2	2	2	2	8	8	12	12	
Rated breaking capability I _{cn} (A Rms) AC23 380V		320	504	640	800	1000	1000	1600	1600	
Rated making capability I _{cm} (A Rms) AC23 380V		400	630	800	1000	1250	1600	2000	2500	
Rated short-current making capability I _{cm} (kA peak value)		2.84	2.84	2.84	2.84	13.6	13.6	17	17	
Mechanical durability 380V		1700	1700	1700	1700	1400	1400	1400	1400	
Electrical curability 380V		300	300	300	300	200	200	200	200	
Operation moment (Nm)		1.2	1.2	1.2	1.2	6.5	6.5	10	10	
Weight (kg)	3 poles	0.37	0.37	0.37	0.37	1.3	1.3	2.2	2.2	
	4 poles	0.41	0.41	0.41	0.41	1.5	1.5	2.6	2.6	

HGL series

Load isolation switch

Table 2

Conventional thermal current I _{th} (A)		630A				1600A			3150A			
Rated current I _n (A)		315	400	500	630	1000	1250	1600	2000	2500	3150	
Rated insulation voltage U _i (V) (installation type IV)		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Dielectric strength (V)		8000	8000	8000	8000	10000	10000	10000	10000	10000	10000	
Rated surge-resistant voltage U _{imp} kV (installed category IV)		6	6	6	6	6	6	6	6	6	6	
Rated working current I _e (A)	380V	AC-21B	315	400	500	630	1000	1250	1600	2000	2500	3150
		AC-22B	315	400	500	630	1000	1250	1600	2000	2500	3150
		AC-23B	315	400	500	630						
	660V	AC-21B	315	400	400	500	1000	1000	1600	2000	2500	2500
		AC-22B	315	315	315	315	800	800	800	1000	1250	1600
		AC-23B										
Motor power P (kW)	380V	160	220	280	315	560	560	560	710	710	710	
	660V	185	185	185	185	475	475	475	750	750	750	
Rated short-time withstand current I _{cw} (kA Rms) 0.1s/1s		25	25	25	25	50	50	50	50	50	50	
Rated breaking capability I _{cn} (A Rms) AC23 380V		2520	3200	4000	5040	3000	3750	4800	6000	7500	9450	
Rated making capability I _{cm} (A Rms) AC23 380V		3150	4000	5000	6300	3000	3750	4800	6000	7500	9450	
Rated short-current making capability I _{cm} (kA peak value)		40	40	40	40	70	70	70	105	105	105	
Mechanical durability (number of cyclic operation)		800	800	800	800	500	500	500	300	300	300	
Electrical curability 380V		200	200	200	200	100	100	100	100	100	100	
Operation moment (Nm)		14.5	14.5	14.5	14.5	37	37	60	60	60	60	
Weight (kg)	3 poles	4.3	4.3	4.7	4.7	10.5	10.5	16	25.5	25.5	31	
	4 poles	5.4	5.4	6	6	13	13	20	37.5	37.5	51.5	

HGL series Load isolation switch

Conformed standard

International standard

IEC60947-1 (1998) 《Low-voltage switchgear and controlgear, part one: General Rules》.

IEC60947-3 (1999) 《Low-voltage switchgear and controlgear, switches, disconnectors, switch-disconnectors and fuse-combination units》.

National standard

GB/T14048.1-2000 《Low-voltage switchgear and controlgear, part one: general Rules》.

GB/T14048.3-2000 《Low-voltage switchgear and controlgear, switches, disconnectors, switch-disconnectors and fuse-combination units》.

Normal work conditions and Installation conditions

※ Ambient temperature: $-5^{\circ}\text{C}\sim 40^{\circ}\text{C}$, relative humidity is not larger than 95%.

※ Altitude: shall not exceed 2000m.

※ No explosive dangerous medium environment.

※ No rain and snow attack environment.

Note: if the load isolation switch is expected to be used in the condition that the ambient temperature is higher than $+40^{\circ}\text{C}$ or is lower than -5°C , customers should inform to the manufactory.

Load isolation switch of HGL-63~3150A

7 specifications of HGL load isolation switch from 63A to 3150A: Basic model of modularized design, 3 poles, 4 poles (3 poles+on and off neutral pole). It is suitable for the making and breaking operation of electric circuit or electric isolation. Switches over 1000A are only suitable for electric isolation.

Mark window is set in the front side to indicate the on and off state of the contact.

Rear observation window can be provided according to the demand to observe directly the on and off state of the contact, for window pattern, refer to the back operational load isolation switch, HGL-63~1600A/H.

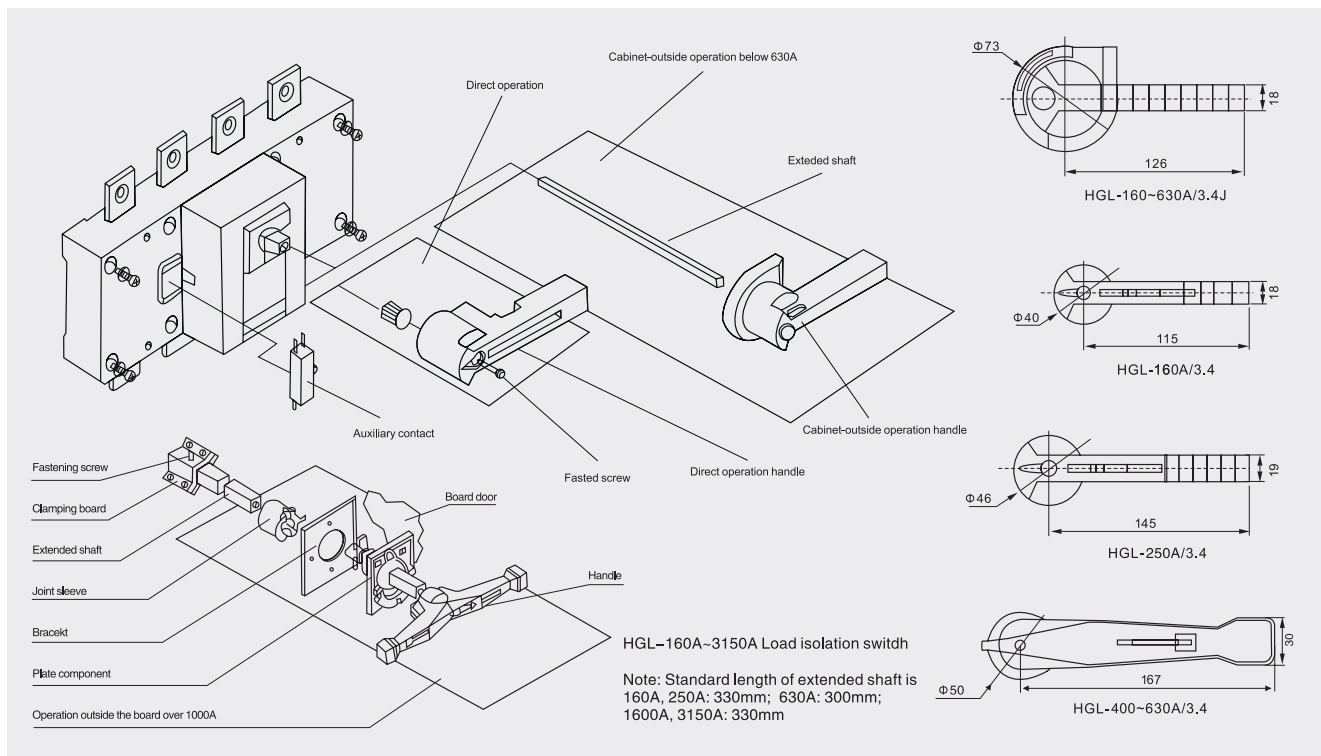
Two group of auxiliary contacts can be assembled.

The electric cable insulating cover can be assembled.

Operation mode

※ Direct operation: The handle is installed in the middle of the switch.

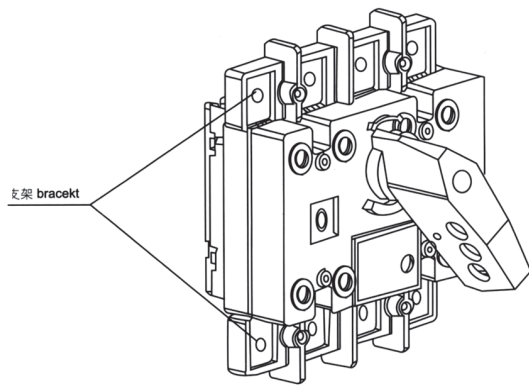
※ Operation outside the board: The handle is installed outside the door of distributing board.



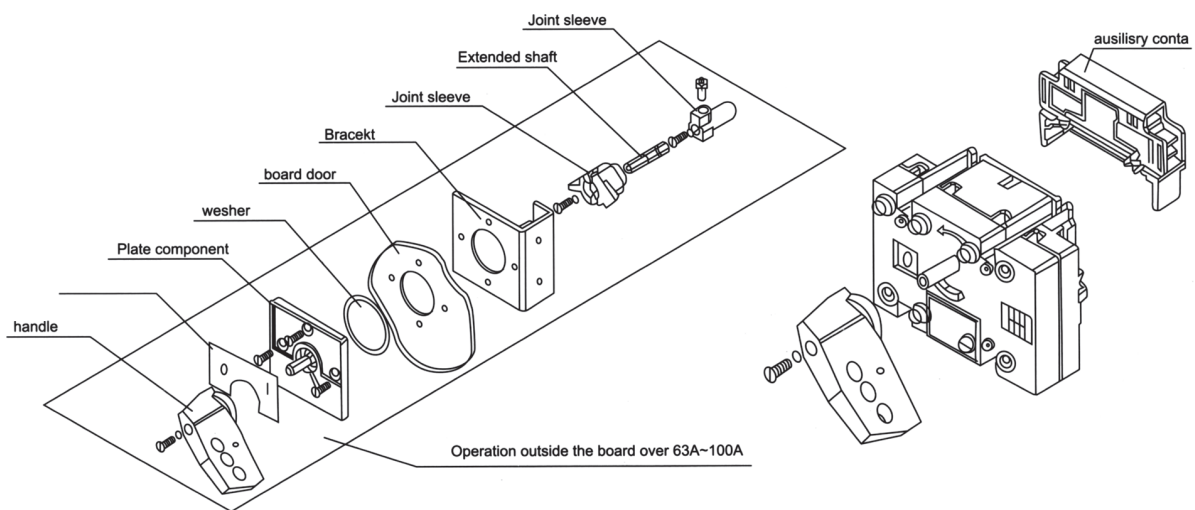
HGL series Load isolation switch

Load isolation switch of HGL-63A~100A

- ※ 63A~100A is suitable for the making and breaking of electrical isolation circuit or electric insulation.
- ※ 63A~100A possesses 3 poles, and 4 poles (3 poles+on of neutral pole).
- ※ Two sets of auxiliary contacts can be assembled according to demand.
- ※ Side operation, operation outside, the board can be assemble according to demand.



Note: It's HGL-100A~630A loading islation switch which is no span

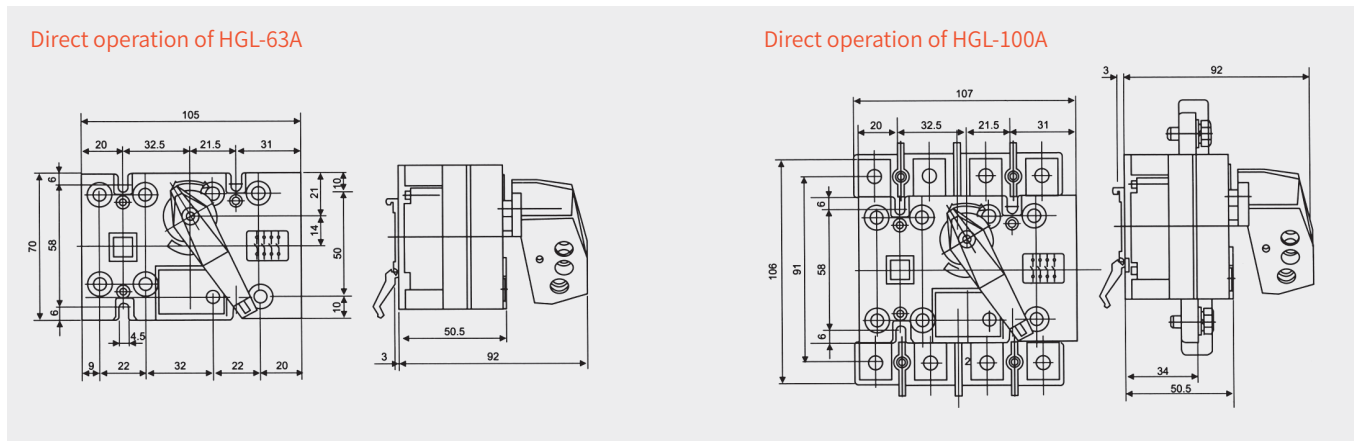


- ※ 63A~100A is suitable for the making and breaking of electrical islation circuit or electric insulation. Two sets of auxiliary contacts can be assembled according to demand.
- ※ 63A~100A possesses three poles, and four poles (3 poles+on of neutral pole). Side operation, operation outside, the board can be assemble according to demand.

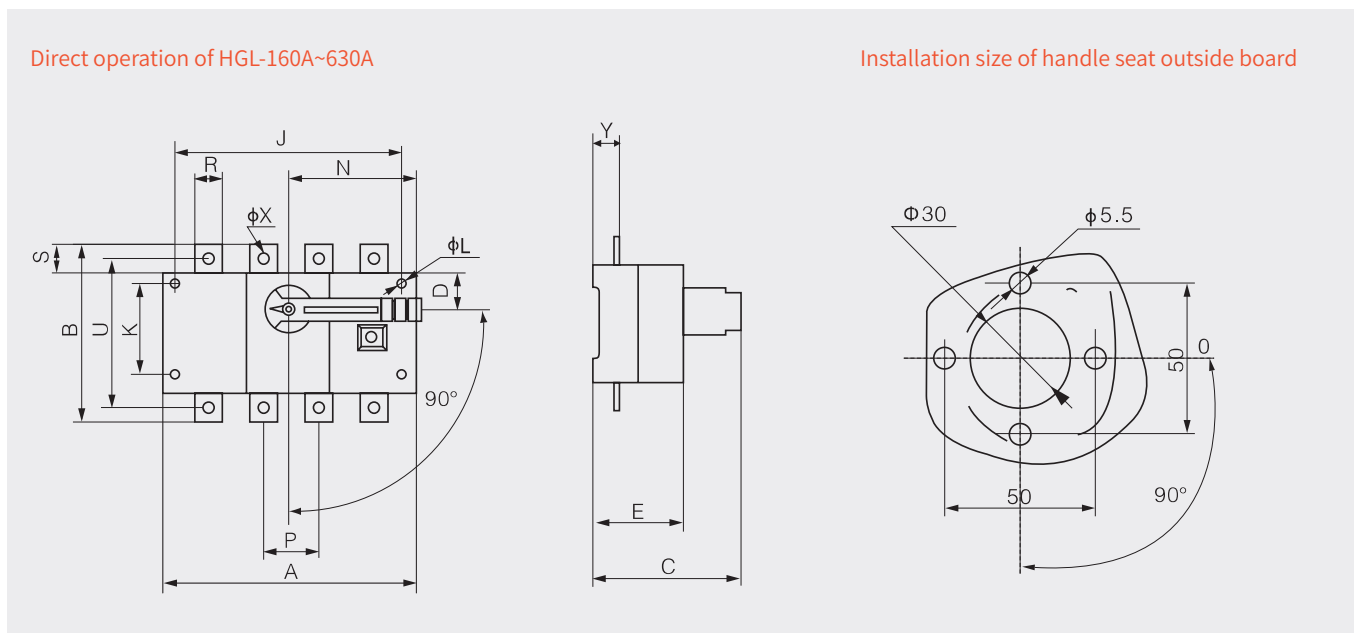
HGL series Load isolation switch

Overall & Installation Dimension

Load isolation switch side operation load isolation switch of HGL-63A~100A

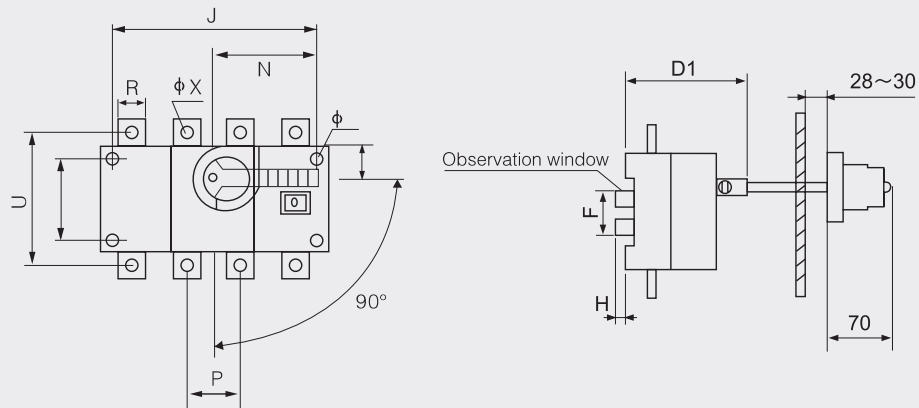


External dimension and installation dimension of HGL-160A~630A load isolation switch



HGL series Load isolation switch

Operation outside HGL-160A~630A/JK

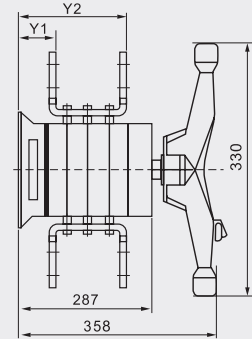
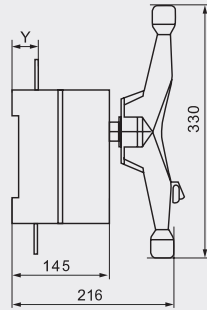
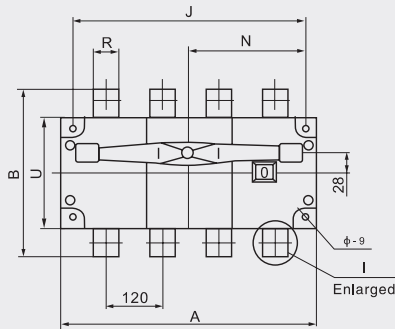


In	A	B	C	D	D1	E	ΦL	J	K	N	P	R	S	U	ΦX	Y	F	H
125A/3	140	135	121	27	93	71	5.5	120	65	75	36	20	25	115	9	24	50	10
125A/4	170	135	121	27	93	71	5.5	150	65	75	36	20	25	115	9	24	50	10
160A/3	140	135	121	27	93	71	5.5	120	65	75	36	20	25	115	9	24	50	10
160A/4	170	135	121	27	93	71	5.5	150	65	75	36	20	25	115	9	24	50	10
200A/3	180	170	144	35	104	84	5.5	160	90	105	50	25	30	140	11	25	79	15
200A/4	230	170	144	35	104	84	5.5	210	90	105	50	25	30	140	11	25	79	15
250A/3	180	170	144	35	104	84	5.5	160	90	105	50	25	30	140	11	25	79	15
250A/4	230	170	144	35	104	84	5.5	210	90	105	50	25	30	140	11	25	79	15
315A/3	230	240	179	50	137	115	7	210	140	135	65	32	40	206	11	37	95	20
315A/4	290	240	179	50	137	115	7	270	140	135	65	32	40	206	11	37	95	20
400A/3	230	240	179	50	137	115	7	210	140	135	65	32	40	206	11	37	95	20
400A/4	290	240	179	50	137	115	7	270	140	135	65	32	40	206	11	37	95	20
500A/3	230	260	179	50	137	115	7	210	140	135	65	40	50	220	13	37.5	95	20
500A/4	290	260	179	50	137	115	7	270	140	135	65	40	50	220	13	37.5	95	20
630A/3	230	260	179	50	137	115	7	210	140	135	65	40	50	220	13	37.5	95	20
630A/4	290	260	179	50	137	115	7	270	140	135	65	40	50	220	13	37.5	95	20

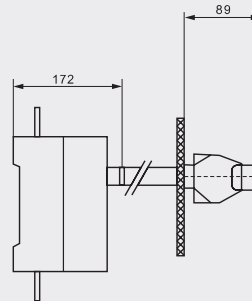
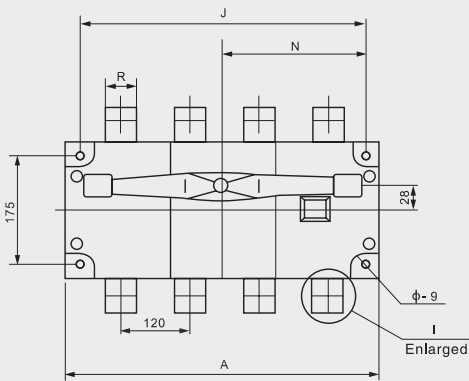
HGL series Load isolation switch

Load isolation switch side operation load isolation switch of HGL-1600A~3150A

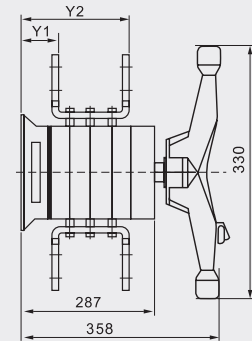
Direct operation of HGL-1600A



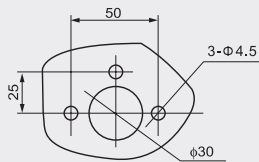
Operation outside of HGL-1600A/JK



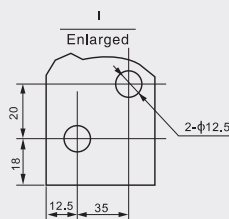
Direct operation of HGL-1600A/JK (operation outside)



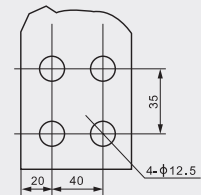
Installation bottom plate for operation outside the board



1000A



1250A~1600A



In	A	A1	B	J	N	R	U	Y	Y1	Y2
1000A/3	378	105	310	353	171	60	200	48		
1000A/4	498	105	310	473	231	60	200	48		
1250A/3	378	105	336	353	171	80	200	48		
1250A/4	498	105	336	473	231	80	200	48		
1600A/3	378	105	336	353	171	80	200	49		
1600A/4	498	105	336	473	231	80	200	49		
2000A/3	378		455	353	171	80	200		78.5	225.5
2000A/4	498		455	473	231	80	200		78.5	225.5
2500A/3	378		455	353	171	80	200		78.5	225.5
2500A/4	498		455	473	231	80	200		78.5	225.5
3150A/3	378		505	353	171	120	200		78.5	227
3150A/4	498		505	473	231	120	200		78.5	227