GL Load Break Switches

1 Overview

GL series load break switches is suitable for the AC 50Hz product with rated AC voltage up to 690V and with rated current up to 3150A; It can be used for infrequent manual connection and disconnection of circuit and for infrequent power isolation.

2 Type Designation

GL □ – □ / □ □ □ □ □ □

- “T” means transparent housing, suitable for operation at front
- “F” means the wiring terminal with a protective cover, suitable for operation at front; default if not required
- Aux. code: Default if not required
  - “11” means 1NO+1NC
  - “22” means 2NO+2NC
- “K” means with indicator; default if without indicator
- “J” means operation outside the cabinet; default if operation inside the cabinet
- Number of poles: 3, 4
- Rated current (A)
- Additional code: Default for operation at front
  - “C”: Operation at the side
  - “Z”: Up-down conversion operation
  - “Z2”: Left-right conversion operation
- Load break switches

Note: 160~630A for transparent model; no aux. contact is required for transparent type product.

3 Technical Parameters

Table 1

Resistive current Ith (A)	100		160		250		400	630	1600			3150		
Rated insulation voltage Ui(V)	800								1000					
Rated working voltage Ue(V)	415/690								380/400					
Usage category	AC-21B													
Rated working current Ie(A)	63	100	125	160	200	250	400	630	800/1000	1250	1600	2000	2500	3150
Rated short-time withstand current (kA/s)	2	2	6	6	9	9	20	20	30	30	30	50	50	50
Mechanical life (times)	1,700	1,700	1,400	1,400	1,400	800	800	800	500	500	500	500	500	300
Electrical life (times)	300	300	200	200	200	200	200	200	100	100	100	100	100	100

GL Load Break Switches

4 Operating Conditions

4.1 Ambient air temperature: -5℃ ~ +40℃;

4.2 Installation altitude: ≤2,000 meters;

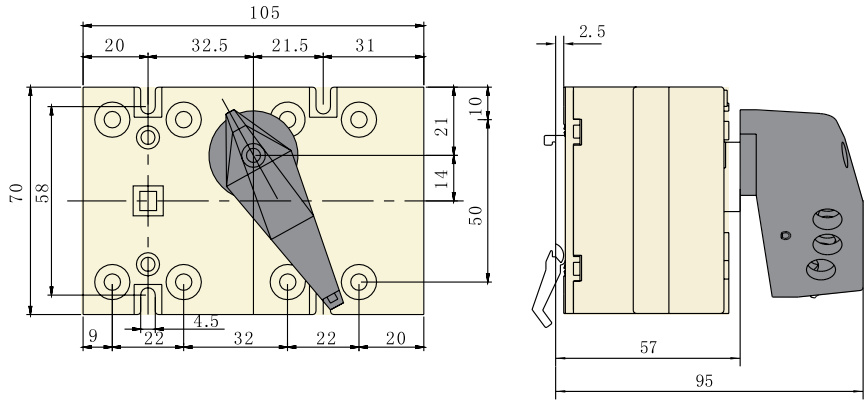
4.3 Humidity: The maximum temperature is 40℃, and the relative air humidity does not exceed 50%. A higher relative humidity is allowed at a lower temperature, such as up to 90% at 20℃. Special measures shall be taken for condensation occurred occasionally due to temperature changes;

4.4 Pollution degree: 3;

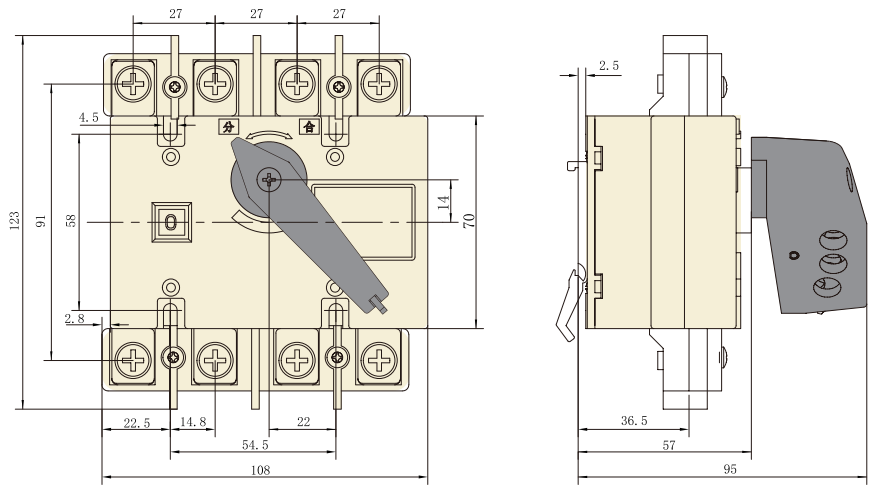
4.5 The switch shall be vertically installed in places where there is no obvious shaking, impact vibration or rain and snow erosion and no explosive and hazardous medium, and there is no enough gas and dust to cause metal corrosion and insulation damage in medium.

5 Outline and Installation Dimensions

5.1 Outline and installation dimensions of GL-63 load break switches

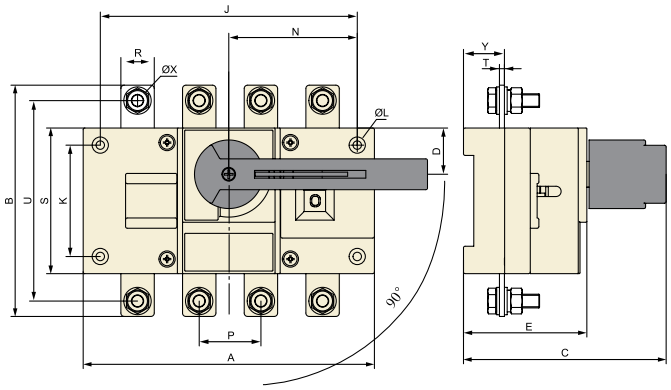


5.2 Outline and installation dimensions of GL-100 load break switches

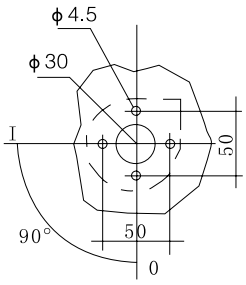


GL Load Break Switches

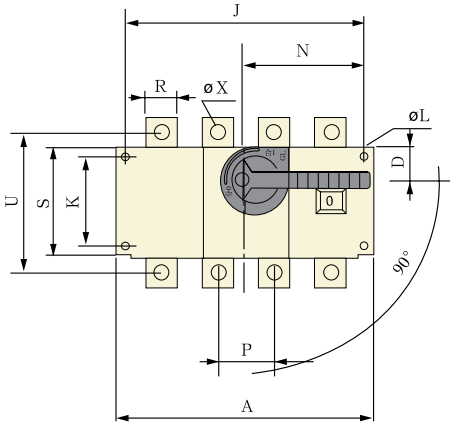
5.3 Outline and installation dimensions of GL-125~630 load break switches



GL-125~630 Direct operation



Installation dimension diagram of GL-125~630 operating handle panel outside the cabinet



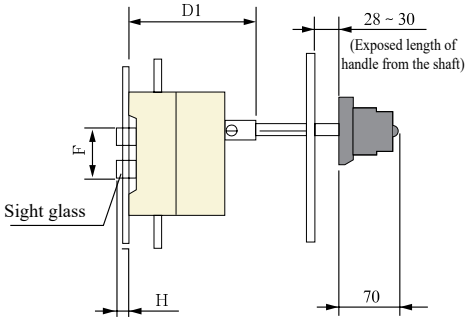


Table 2

Spec.	Outline dimensions and installation dimensions (mm)																		
Current	A	B	C	D	D1	E	φL	J	K	N	P	R	S	T	U	φX	Y	F	H
125,,160/3	140	135	125	27	92	73	5.5	120	65	75	36	20	85	3	117	9	24	50	10
125,160/4	170	135	125	27	92	73	5.5	150	65	75	36	20	85	3	117	9	24	50	10
200,250/3	180	170	138	35	98	86	5.5	160	90	105	50	25	110	3	140	11	26	79	15
200,250/4	230	170	138	35	98	86	5.5	210	90	105	50	25	110	3	140	11	26	79	15
400/3	230	240	185	50	135	110	7	210	140	135	65	32	160	4.5	206	11	37	95	20
400/4	290	240	185	50	135	110	7	270	140	135	65	32	160	4.5	206	11	37	95	20
630/3	230	260	185	50	135	110	7	210	140	135	65	40	160	5	220	13	37	95	20
630/4	290	260	185	50	135	110	7	270	140	135	65	40	160	5	220	13	37	95	20

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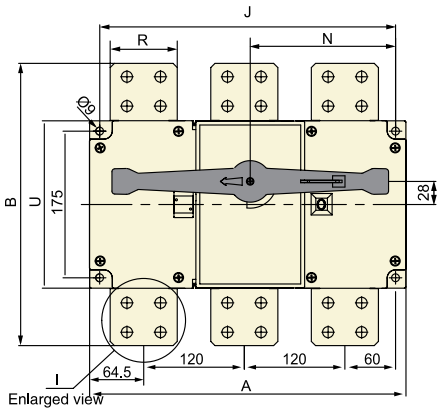
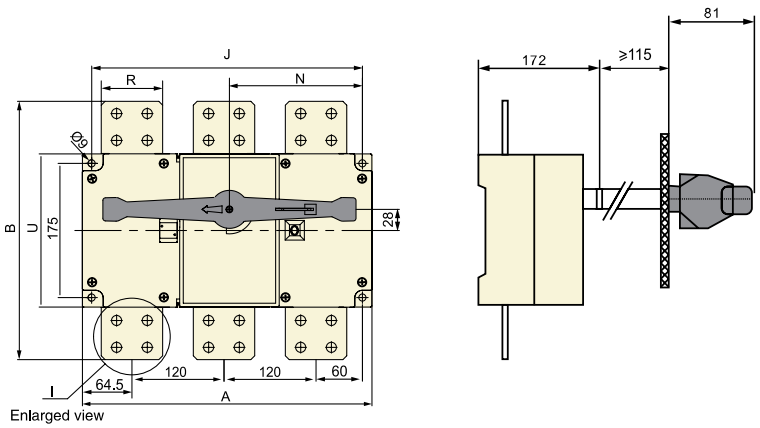
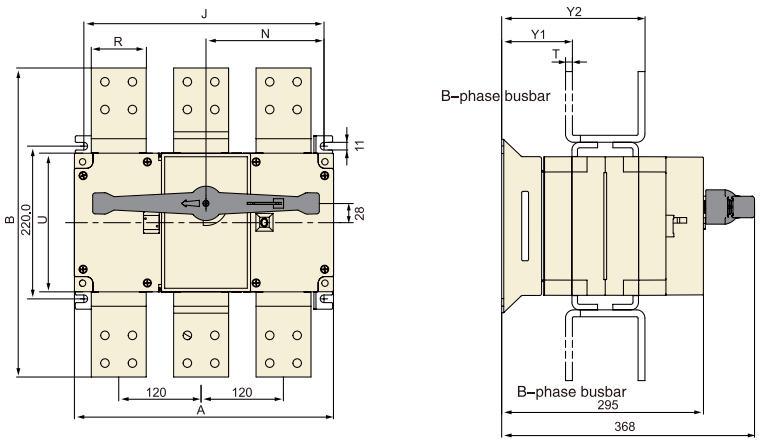
5.4 Outline and installation dimensions of GL-1000~3150 load break switches



GL-800~1600A direct operation

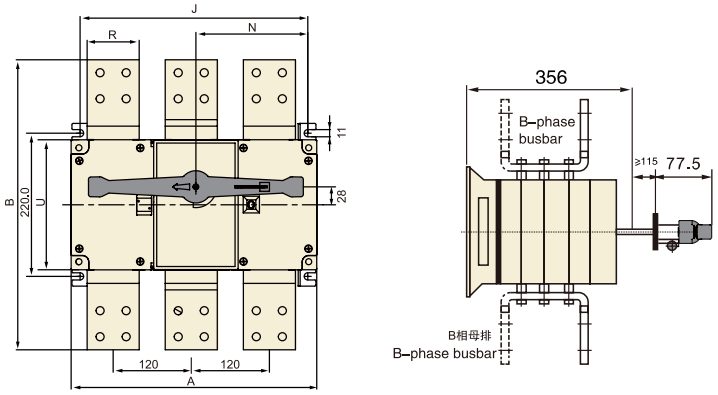


GL-800~1600A/JK operation outside cabinet

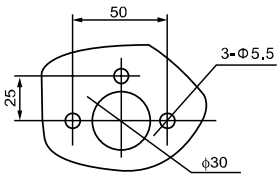


GL-2000~1600A direct operation

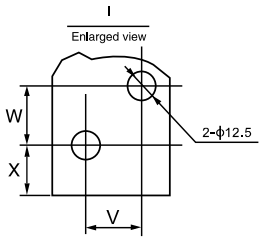
GL Load Break Switches



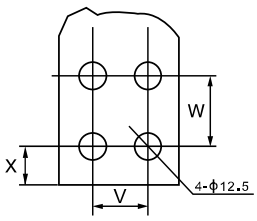
GL-2000~3150A operation outside cabinet



Installation dimension diagram of GL-1000~3150 operating handle panel outside the cabinet



1000A



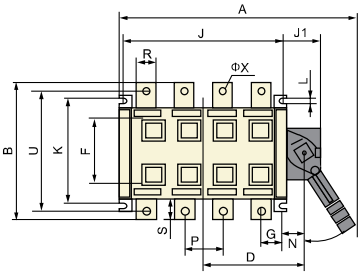
1250~3150A

Table 3

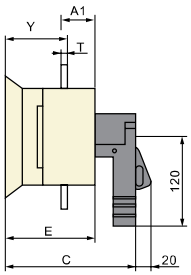
Spec.	Outline dimensions and installation dimensions (mm)											
Current	A	B	J	N	R	T	U	Y(Y1,Y2)		V	W	X
800,1000/3	378	310	353	174	60	8	200	48		35	20	16.5
800,1000/4	498	310	471	235	60	8	200	48		35	20	16.5
1250/3	378	336	353	174	80	8	200	48		40	35	16
1250/4	498	336	471	235	80	8	200	48		40	35	16
1600/3	378	336	353	174	80	10	200	49		40	35	16
1600/4	498	336	471	235	80	10	200	49		40	35	16
2000/3	378	445	353	174	80	10	200	103	208.5	40	40	20
2000/4	498	447	471	235	80	10	200	104	210	40	40	20
2500/3	378	445	353	174	80	10	200	103	208.5	40	40	20
2500/4	498	447	471	235	80	10	200	104	210	40	40	20
3150/3	378	492	353	174	120	12	200	77	237	50	50	21
3150/4	498	494	471	235	120	12	200	78	238	50	50	21
3150/3 customized	378	492.	353	174	120	15	200	72	235	50	50	21
3150/4 customized	498	494	471	235	120	15	200	72	235	50	50	21

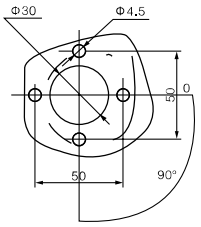
GL Load Break Switches

5.5 Outline and installation dimensions of GLC-160~630 load break switches with side operation

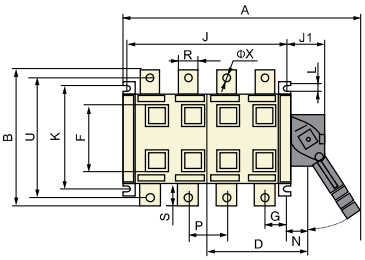


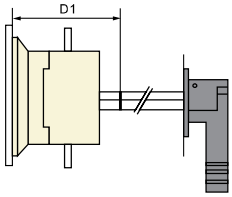
GLC-160A direct operaiton





Installation dimensions of handle seat outside the cabinet





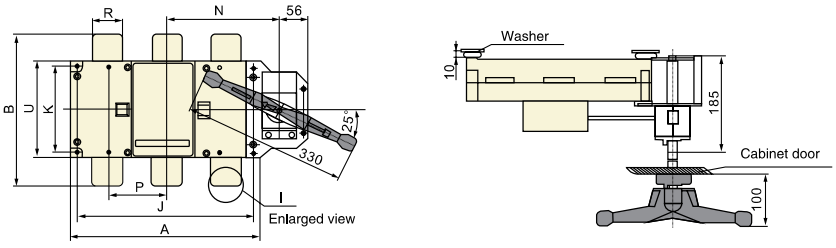
GLC-160A~630A/K operation outside cabient

Table 4

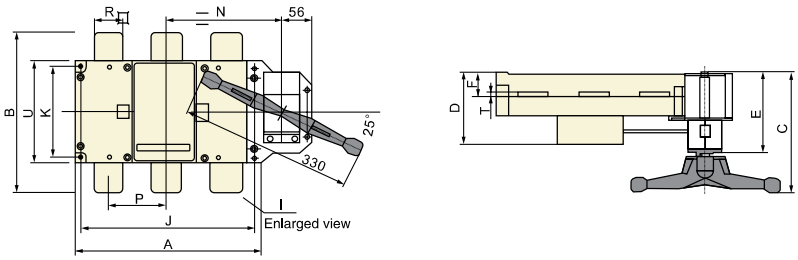
Spec.	Outline dimensions and installation dimensions (mm)																			
Current	A	B	C	D	D1	E	J	J1	K	N	P	R	T	U	φX	Y	L	F	S	G
125/3	267	135	147	89	125	88	120	65	95	29	36	20	3	115	9	25	7	50	25	28
125/4	297	135	147	104	125	88	150	65	95	29	36	20	3	115	9	25	7	50	25	22
160/3	267	135	147	89	125	88	120	65	95	29	36	20	3	115	9	25	7	50	25	28
160/4	297	135	147	104	125	88	150	65	95	29	36	20	3	115	9	25	7	50	25	22
200/3	308	170	167	110	134	98	160	65	116	30	50	25	3	140	11	25	9	79	30	33
200/4	358	170	167	135	134	98	210	65	116	30	50	25	3	140	11	25	9	79	30	33
250/3	308	170	167	110	134	98	160	65	116	30	50	25	3	140	11	25	9	79	30	33
250/4	358	170	167	135	134	98	210	65	116	30	50	25	3	140	11	25	9	79	30	33
400/3	420	240	208	150	166	129	210	77	179	45	65	32	4.5	206	11	37	11	95	40	42
400/4	490	240	208	180	166	129	270	77	179	45	65	32	4.5	206	11	37	11	95	40	38
630/3	420	260	208	150	166	129	210	77	179	45	65	40	5	220	13	37	11	94	50	42
630/4	490	260	208	180	166	129	270	77	179	45	65	40	5	220	13	37	11	94	50	38

GL Load Break Switches

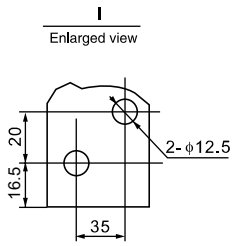
5.6 Outline and installation dimensions of GLC-1000~1600 load break switches with side operation



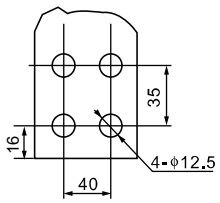
GLC-1600A/3J operaiton outside the cabinet



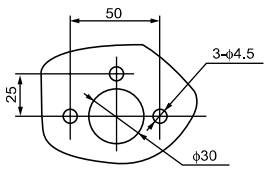
GLC-1600A/3 direct operaiton



1000A



1250A-1600A



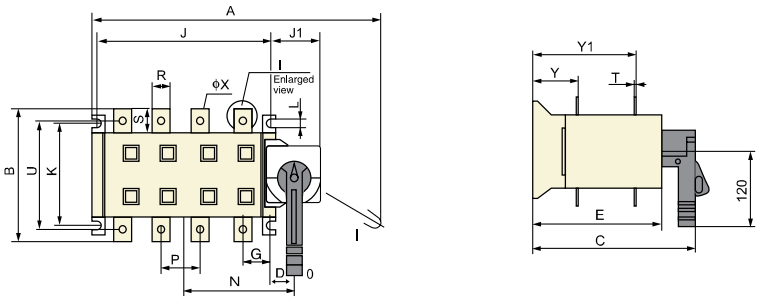
Installation dimensions of handle seat outside the cabinet

Table 5

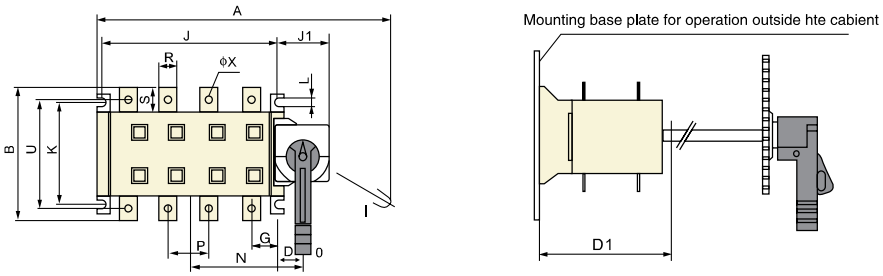
Spec.	Outline dimensions and installation dimensions (mm)												
Current	A	B	C	D	E	F	J	K	N	P	R	U	T
1000/3	378	310	249	140.5	179	48	353	175	241.5	120	60	200	8
1000/4	498	310	249	140.5	179	48	473	175	301.5	120	60	200	8
1250/3	378	336	249	140.5	179	48	353	175	241.5	120	80	200	8
1250/4	498	336	249	140.5	179	48	473	175	301.5	120	80	200	8
1600/3	378	336	249	140.5	179	48	353	175	241.5	120	80	200	10
1600/4	498	336	249	140.5	179	48	473	175	301.5	120	80	200	10

GL Load Break Switches

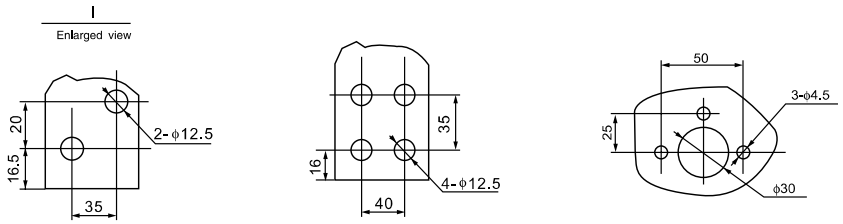
5.7 Outline and installation dimensions of GLZ up-down conversion load break switches



GLZ-100A~1600A direct operation



GLZ-100A~1600A operaiton outside the cabinet



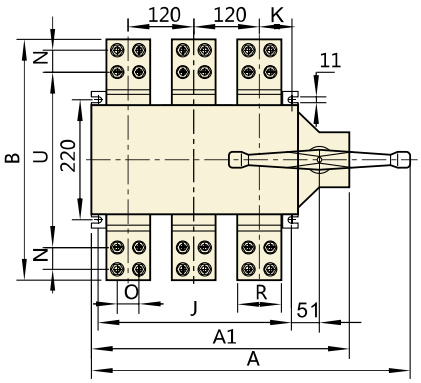
1000A　　1250A-1600A　　Installation dimensions of handle seat outside the cabinet

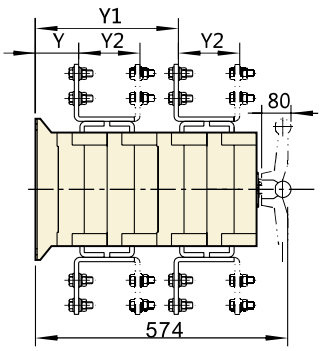
Table 6

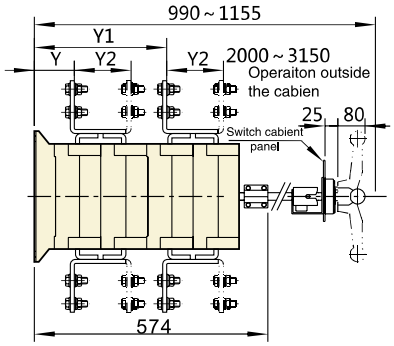
Spec.	Outline dimensions and installation dimensions (mm)																	
Current	A	B	C	D	D1	E	J	J1	K	L	P	R	T	U	φX	Y	Y1	G
GLZ-100/3	277	110	170	39	149	120	115	75	85	7	30	14	2. 5	90	6	41	92	12. 5
GLZ-100/4	277	110	170	39	149	120	115	75	85	7	30	14	2. 5	90	6	41	92	12.5
125~160/3	267	135	212	29	189	165	120	65	95	7	36	20	3	115	9	55	121	28
125~160/4	297	135	212	29	189	165	150	65	95	7	36	20	3	115	9	55	121	22
200~250/3	308	170	249	30	215	182	160	65	116	9	50	25	3	140	11	64	146	33
200~250/4	358	170	249	30	215	182	210	65	116	9	50	25	3	140	11	64	146	33
400/3	420	240	318	45	272	241	210	77	179	11	65	32	4.5	206	11	83	193	42
400/4	490	240	318	45	272	241	270	77	179	11	65	32	4.5	206	11	83	193	38
630/3	420	240	318	45	272	241	210	77	179	11	65	40	5	220	13	83	193	42
630/4	490	240	318	45	272	241	270	77	179	11	65	40	5	220	13	83	193	38
1000/3	578	312	392	52.5	340	309	353	108.5	220	11	120	60	8	235	13	107	251.5	53. 5
1000/4	698	312	392	52.5	340	309	473	108.5	220	11	120	60	8	235	13	107	251.5	50. 5
1250/3	578	338	392	52.5	340	309	353	108.5	220	11	120	80	8	235	13	107	251.5	53. 5
1250/4	698	338	392	52.5	340	309	473	108.5	220	11	120	80	8	235	13	107	251.5	50. 5
1600/3	578	338	392	52.5	340	309	353	108.5	220	11	120	80	10	235	13	108	251.5	53. 5
1600/4	698	338	392	52.5	340	309	473	108.5	220	11	120	80	10	235	13	108	251.5	50. 5

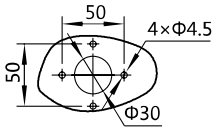
GL Load Break Switches

5.8 GLZ-2000~3150 outline and installation dimensions









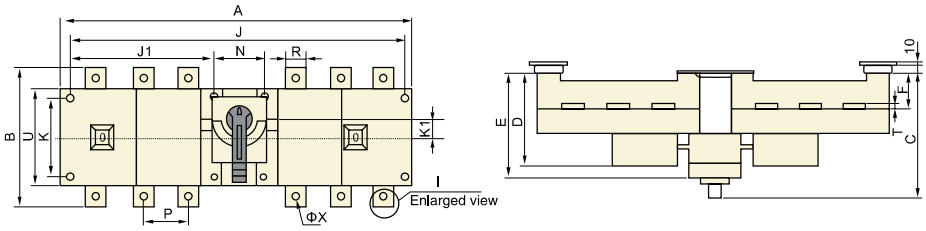
Installation dimension diagram of operating handle panel outside the cabinet

Table 7

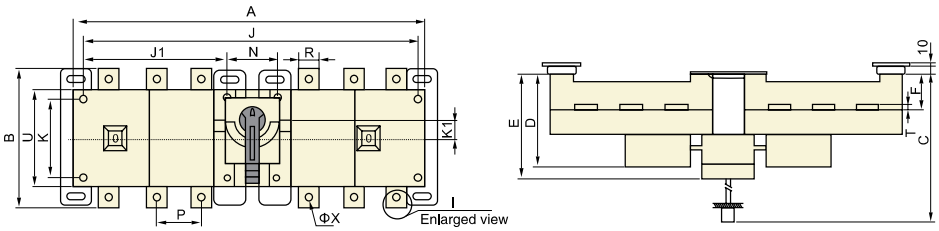
Spec.	Outline dimensions and installation dimensions (mm)											
Current	A	A1	B	K	R	J	U	O	N	Y	Y1	Y2
2000A/3	582	450	445	53.5	80	353	325	40	40	102	341	105
2500A/3	582	450	445	53.5	80	353	325	40	40	102	341	105
3150A/3	582	450	492	53.5	120	353	350	50	50	76	315	105
2000A/4	697	565	447	50.5	80	471	325	40	40	103	342	105
2500A/4	697	565	447	50.5	80	471	325	40	40	103	342	105
3150A/4	697	565	494	50.5	120	471	350	50	50	76	315	105

GL Load Break Switches

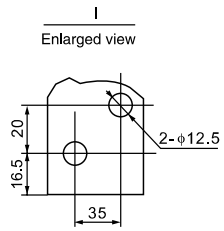
5.9 Outline and installation dimensions of GLZ2-160~1600 left-right conversion load break switches



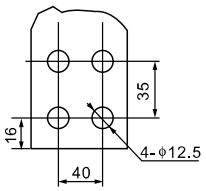
GLZ-160A~1600A direct operation



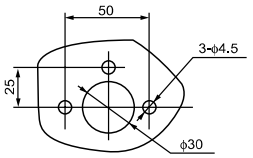
GLZ-160A~1600A operaiton outside the cabinet



1000A



1250A-1600A



Installation dimensions of handle seat outside the cabinet

Table 8

Spec.	Outline dimensions and installation dimensions (mm)																		
Current	A	B	C	D	E	F	J	J1	K	K1	M	N	P	Q	R	U	φX	T	W
125~160/3	319	135	125	67	89	24	299	120	0	16	5. 5	59	36	218	20	85	9	3	190
125~160/4	379	135	125	67	89	24	359	150	0	16	5. 5	59	36	218	20	85	9	3	190
200~250/3	405	170	134	79	104	25	385	160	0	20	5. 5	65	50	218	25	110	11	3	190
200~250/4	505	170	134	79	104	25	485	210	0	20	5. 5	65	50	218	25	110	11	3	190
400/3	535	240	166	108	131	37	515	210	0	30	6. 5	95	65	270	32	160	11	4.5	240
400/4	655	240	166	108	131	37	635	270	0	30	6. 5	95	65	270	32	160	11	4.5	240
630/3	535	240	166	108	131	37. 5	515	210	0	30	6. 5	95	65	270	40	160	13	5	240
630/4	655	240	166	108	131	37. 5	635	270	0	30	6. 5	95	65	270	40	160	13	5	240
1000/3	836	312	179	141	163	48	811	353	0	27	8. 5	105	120	311	60	200	13	8	280
1000/4	1076	312	179	141	163	48	1051	473	0	27	8. 5	105	120	311	60	200	13	8	280
1250/3	836	338	179	141	163	48	811	353	0	27	8. 5	105	120	311	80	200	13	8	280
1250/4	1076	338	179	141	163	48	1051	473	0	27	8. 5	105	120	311	80	200	13	8	280
1600/3	836	338	179	141	163	48	811	353	0	27	8. 5	105	120	311	80	200	13	10	280
1600/4	1076	338	179	141	163	48	1051	473	0	27	8. 5	105	120	311	80	200	13	10	280

GL Load Break Switches

6 Ordering Notice

The ordering unit must specify the model, features, voltage grade, current grade, number of poles, operation mode and quantity of break switches. For special ordering requirements, please contact our company's technical department.

For example: GL-200/3J 200A 10 pcs.