

# GLOQ1

## Automatic Transfer Switching

### Application



GLOQ1 Dual Power Automatic Transfer Switch Series is a kind of new automatic transfer switch gathered switch and logic controller, achieve mechanic and electricity turn into a integral whole. It is suitable for using in the distribution equipment in industry and business with rated insulating voltage up to 690V, rated frequency 50Hz/60Hz, rated voltage 380V, conventional heating current up to 3200A ,supplying for switch automatically of Normal power and reserve power in power system or switch automatically and safety isolation of two sets load device etc. It can be used for hospital, shop, bank, high building, coal mine, telecommunication, iron mine, superhighway, airport, industrial flowing water line and military installation etc. important situation where disallow power supply failure.

The switch can achieve full-automatic, compulsory “0”, remote control, urgent manual-operation; while have lack phase examination and protection, under/over voltage examination and protection, frequency examination and protection and delay regulation, electric mechanism interlock etc. function

### Product Features

Good safety

- ◆ With double-row composite contact, leverly-pulling opening and closing mechanism, micro motor energy pre-stored technology as well as microelectronic control technology, it can basically realize no flashover (no arc chute)
- ◆ Adopt reliable mechanical and electrical interlocking
- ◆ Due to zero crossing technology, it can set to zero compulsorily under emergency (Cut off double circuit power synchronously)
- ◆ With visible indication of on/off position and padlocking function, it can get the space between power supply and load.

High reliability, service life reaching 8000 times.

- ◆ Being designed with electromechanical integration, the switch transfers accurately, flexibly and smoothly.

Superior electromagnetism compatibility, strong capability to resist the interference, no interference to outside

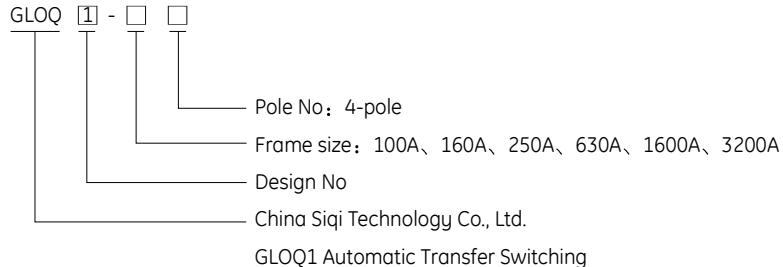
High automation

- ◆ The switch has multi-circuit input/output interface that can realize PLC remote control as well as automation of system.
- ◆ The switch needn't any external control elements.

Nice appearance, small volume, light weight

- ◆ The product conforms to following standards: GB/T 14048.11-2008/IEC60947-6-1 Automatic Transfer Switching Equipment, GB/T14048.3-2008/IEC60947-1 Low—voltage Switchgear and Controlgear General Rules as well as GB/14048.3-2008/IEC60947-3 Low-voltage Switchgear and Controlgear--Low-voltage Switches, Disconnectors, Switch-disconnectors and Fuse-combination units.

## Model description



## Function

Our GLOQ1 is divided into two types-Basic type and Fire control type

### Basic type has follow functions

Full-automatic: i.e. Auto-switch-in, auto-restoring. When Normal power is off, switch will transfer to reserve power automatically; when Normal power is normal, switch will transfer to Normal power.

Compulsory “0” : Under urgent situation or device examination, push compulsory “0” self-lock button, switch will transfer to position “0” to cut off both normal power and reserve power.

With generator: when normal power cut off, send out the starting signal of generator, to make generator starting automatically. When normal, the switch will transfer to generate electric automatically. When normal power comes normal, the switch will turn to normal power automatically. Meanwhile send out closing signal of generator, thus closed generator.

### Fire control type has follow functions

Full-automatic: i.e. Auto-switch-in, auto-restoring. When Normal power is off, switch will transfer to reserve power automatically; when Normal power is normal, switch will transfer to Normal power.

Compulsory “0” : Under urgent situation or device examination, push compulsory “0” self-lock button, switch will transfer to position “0” to cut off both normal power and reserve power.

With generator: when normal power cut off, send out the starting signal of generator, to make generator starting automatically. When normal,

the switch will transfer to generate electric automatically. When normal power comes normal, the switch will turn to normal power automatically. Meanwhile send out closing signal of generator, thus closed generator.

Remote control: i.e. operation and control at long distance. Push button “I”, normal power will work; push button “II”, then reserve power will work.

Lack phase examination and protection: exam and protect breaking of any phase of normal power and reserve power.

### Instruct piece: Has three state

I means switch I is on.

II means switch II is on.

“0” means switch I, II are all off.

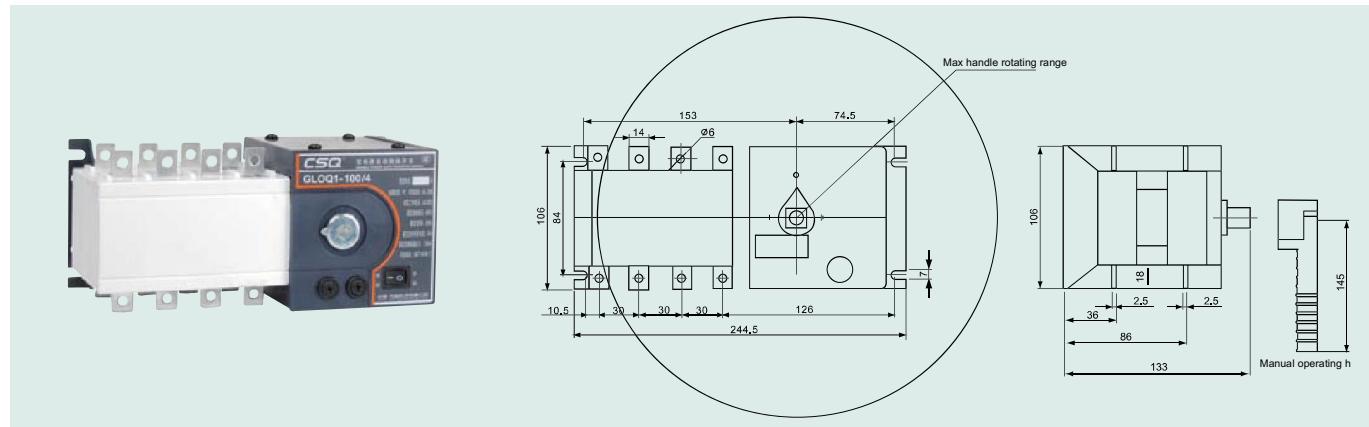
# GLOQ1

## Automatic Transfer Switching

### GLOQ1-100 Main technical indexes

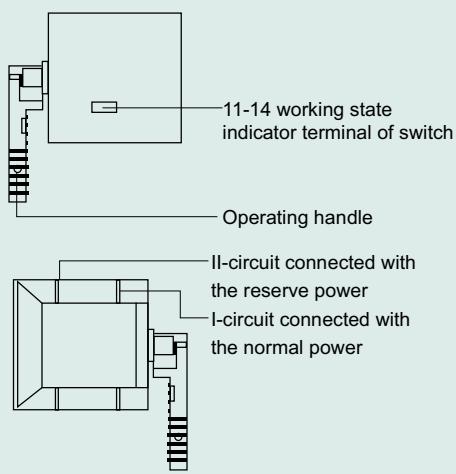
Conventional heating current	20A	40A	60A	80A	100A
Rated insulation voltage $U_i$			690V		
Rated impaction withstand voltage $U_{imp}$			8KV		
Rated working voltage $U_e$			AC380V		
Rated working current $I_e$	20A	63A	63A	80A	100A
Load character			AC33iB		
Rated making capacity			10le		
Rated breaking capacity			8le		
Rated limiting short-circuit current			50KA		
Rated short time withstand current $I_e$			7KA		
Change-over time			1S		
Voltage of control power supply			AC220V		
Energy consumption of the motor			40W		
Weight Kg	4.2	4.3	4.4	4.5	4.5

### GLOQ1-100 Outline and installation dimensions

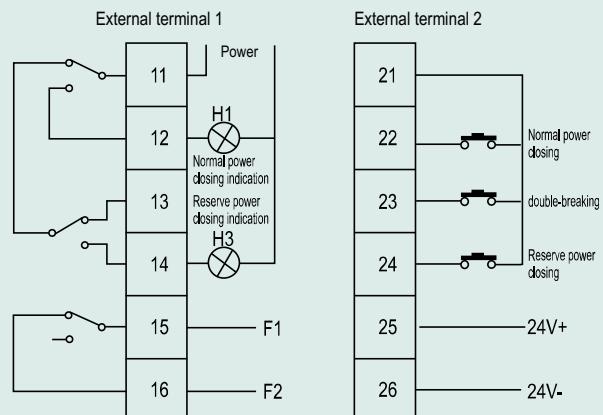


### Wiring diagram

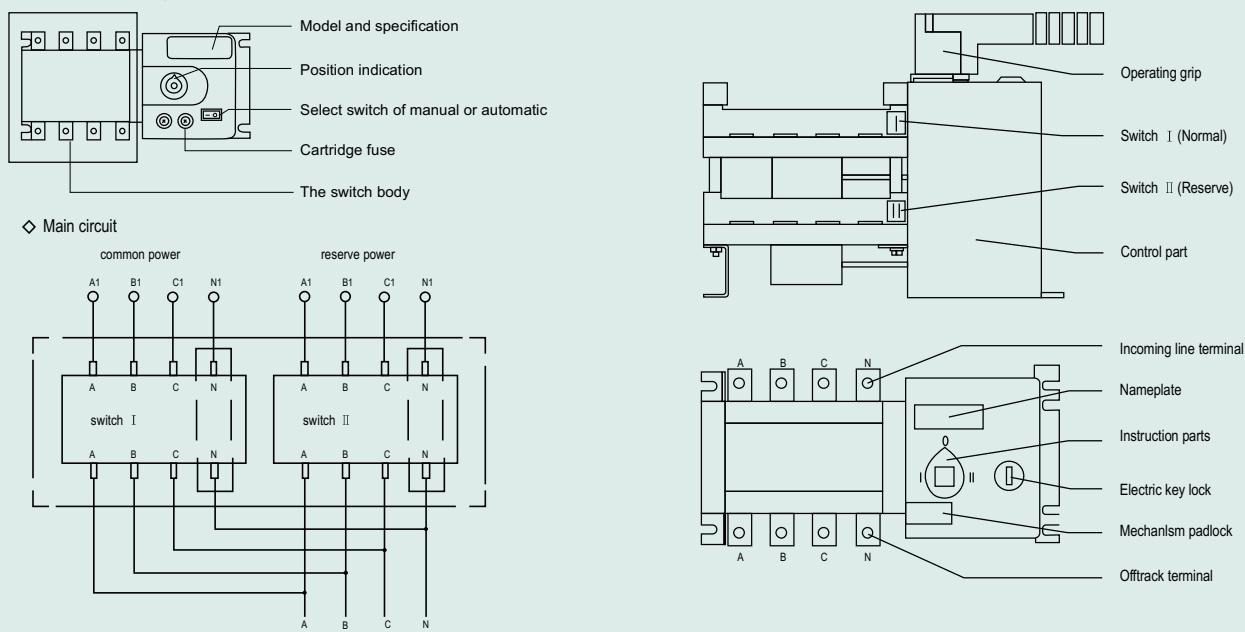
Typical wiring method



Wiring diagram of two-segment terminal



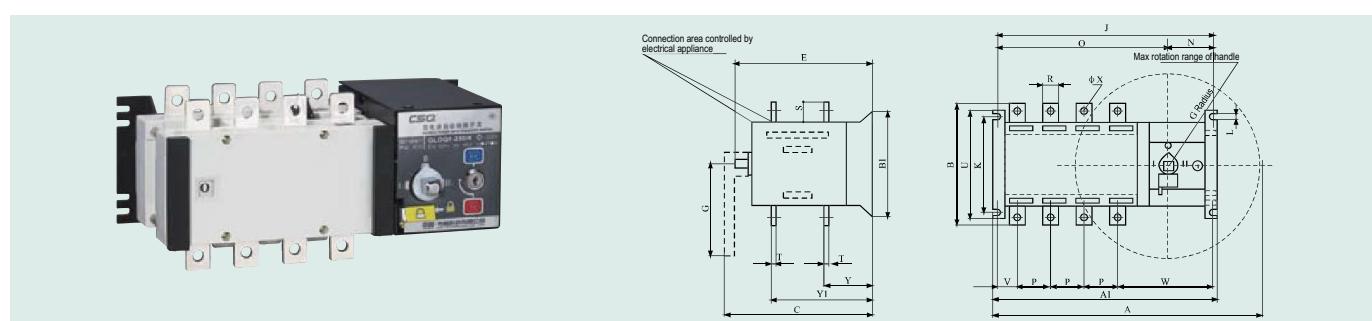
## Switch structure explanation



## GLOQ1-125~3200 Main technical indexes

Conventional heating current	125A	160A	250A	400A	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	
Rated insulation voltage $U_i$	800V												
Rated impaction withstand voltage $U_{imp}$	8KV												
Rated working voltage $U_e$	AC440V												
Rated working current $I_e$	AC-32B	125	160	250	400	630	800	1000	1000	1250	2000	2000	
Rated making capacity		17KA		25.2KA		34KA							
Rated breaking capacity													
Rated limiting short-circuit current $I_S$		20KA		50KA									
Rated short time withstand current $I_S$		10KA		12.6KA		20KA							
Change-over time		2S		3S									
Voltage of control power supply		AC220V											
Energy consumption of the motor	Start	300W	325W		355W		400W	440W		600W			
	Normal	55W	62W		74W		90W	98W		120W			
Weight Kg	4-pole	7.5	8.8	9	16.5	17	32	36	40	49	95	98	135

## GLOQ1-125~1600 outline and installation dimensions

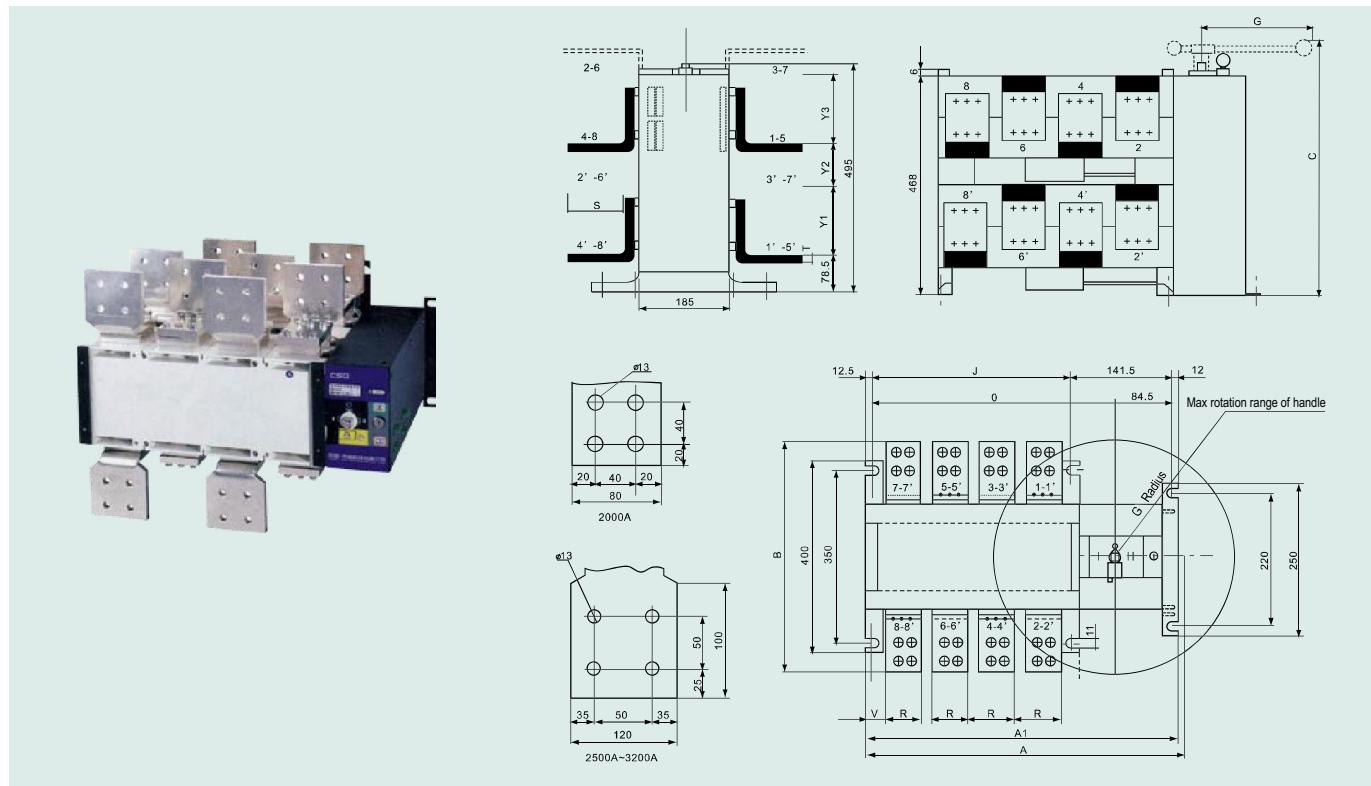


# GLOQ1

## Automatic Transfer Switching

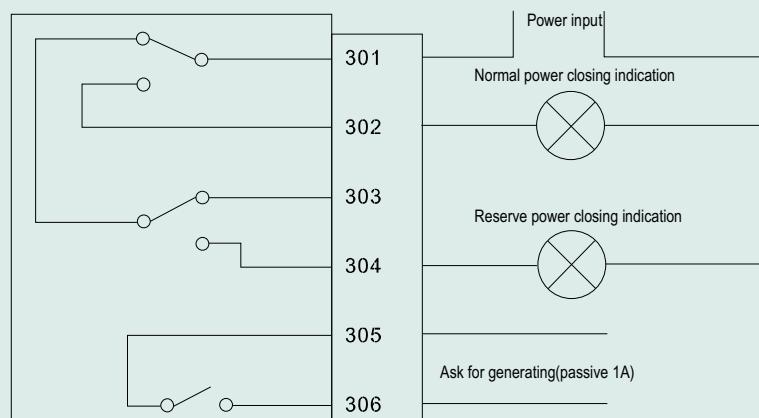
规格	A	A1	B	B1	C	E	G	J	K	L	N	O	P	R	S	T	U	V	W	ΦX	Y	Y1	K1
125A/4	406	320	135	134	261	208	192	295	78/108	7	87	207	36	20	25	3.5	134	33.5	155	9	56	141	63/93
160A/4	406	320	135	134	261	208	192	295	78/108	7	87	207	36	20	25	3.5	134	33.5	155	9	56	141	63/93
200A/4	446	380	170	134	261	208	192	365	78/108	7	87	266	50	25	30	3.5	134	40	164	11	61	147	63/93
250A/4	446	380	170	134	261	208	192	365	78/108	7	87	266	50	25	30	3.5	134	40	164	11	61	147	63/93
400A/4	520	445	240	208	333	266	192	422	176	11	113.5	315	65	32	40	5	208	31	193	11	83	193	
630A/4	520	445	260	208	333	266	192	422	176	11	113.5	315	65	40	50	6	208	31	193	13	84	194	
800A/4	1007	633	340	250	370	321	470	609	220	11	85	524	120	80	70	8		60.5	188.5		110	258	
1000A/4	1007	633	340	250	370	321	470	609	220	11	85	524	120	80	70	8		60.5	188.5		110	258	
1250A/4	1007	633	340	250	370	321	470	609	200	11	85	524	120	80	70	8		60.5	188.5		110	258	
1600A/4	1007	633	340	250	370	321	470	609	200	11	85	524	120	80	80	12		60.5	188.5		114	262	

### GLOQ1-2000~3200 outline and installation dimensions



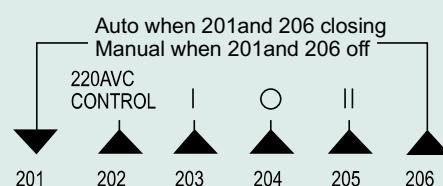
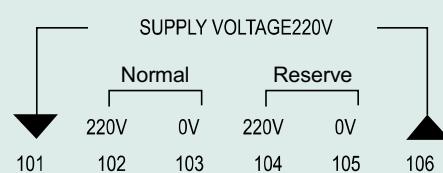
规格	Overall size							Installation for switch					Connecting terminal										
	A	A1	B	C	E	G	H	J	K	L	N	O	P	R	S	T	U	V	W	X	Y1	Y2	Y3
2000A	1007	633	455	556		470		467				524		80	80	15		33			147	84	147
2500A	1007	633	455	556		470		467				524		120	112	15		13			152	79	152
3200A	1007	633	505	556		470		467				524		120	112	15		13			152	79	152

## GLOQ1-125-3200 basic type terminal wiring diagram



External terminal 3

## GLOQ1-125-3200 fire control type terminal wiring diagram



202-203 I remote control closing.  
 202-204 O remote control closing.  
 202-205 II remote control closing.  
 201-206 Off is manual remote control and closing is auto control

