

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, levelly-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.

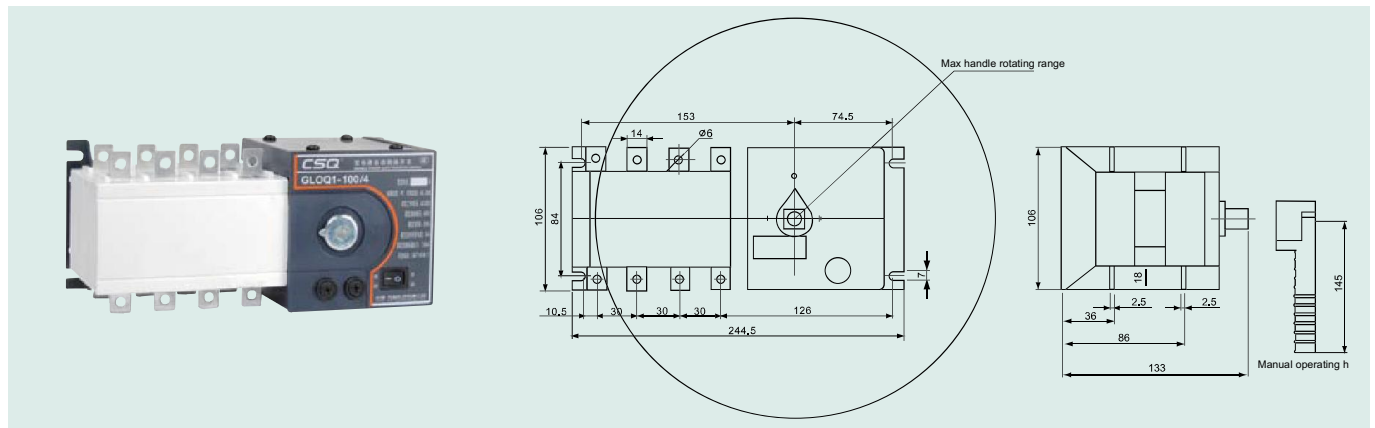
GLOQ1

Automatic Transfer Switching

GLOQ1-100 Main technical indexes

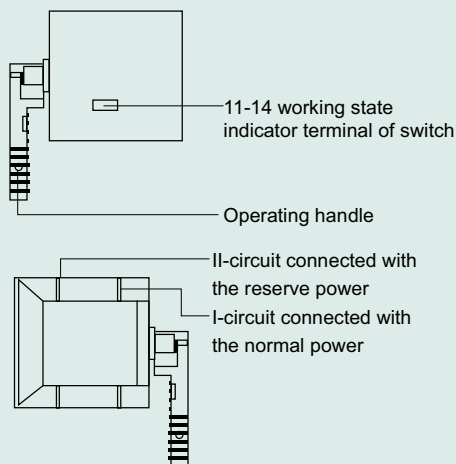
Conventional heating current	20A	40A	60A	80A	100A
Rated insulation voltage U_i	690V				
Rated impaction withstand voltage U_{imp}	8KV				
Rated working voltage U_e	AC380V				
Rated working current I_e	20A	63A	63A	80A	100A
Load character	AC33iB				
Rated making capacity	10Ie				
Rated breaking capacity	8Ie				
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

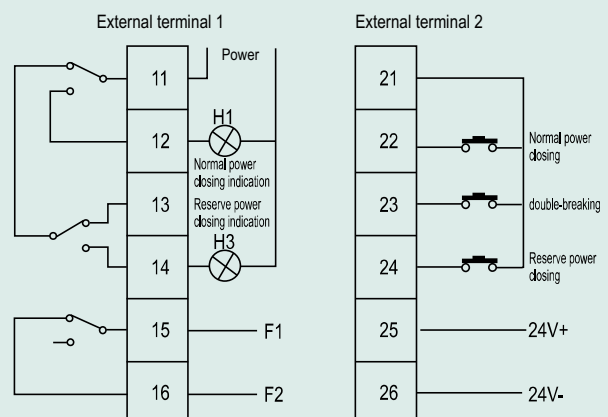


Wiring diagram

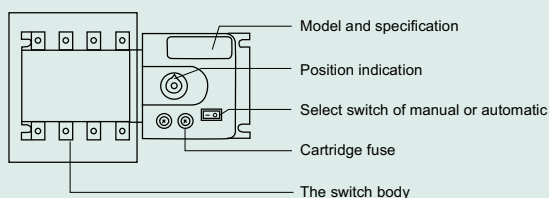
Typical wiring method



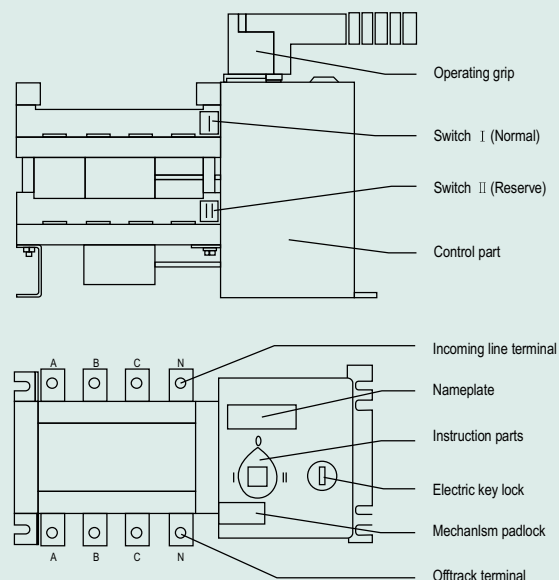
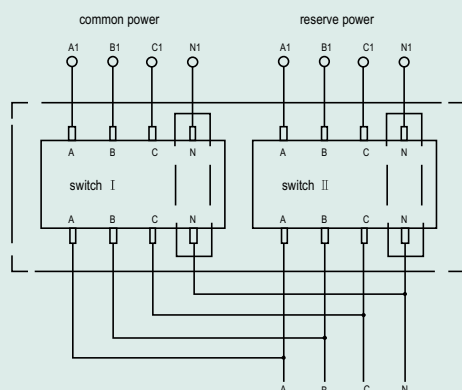
Wiring diagram of two-segment terminal



Switch structure explanation



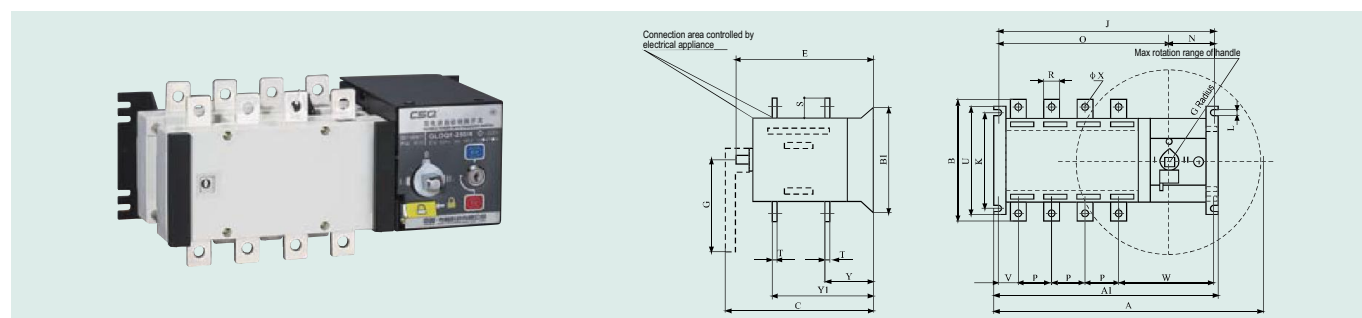
◇ Main circuit



GLOQ1-125~3200 Main technical indexes

Conventional heating current		125A	160A	250A	400A	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A
Rated insulation voltage Ui		800V											
Rated impaction withstand voltage Uimp		8KV						12KV					
Rated working voltage Ue		AC440V											
Rated working current Ie	AC-32B	125	160	250	400	630	800	1000	1000	1250	2000	2000	2500
Rated making capacity		17KA			25.2KA			34KA					
Rated breaking capacity													
Rated limiting short-circuit current		20KA						50KA					
Rated short time withstand current IS		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

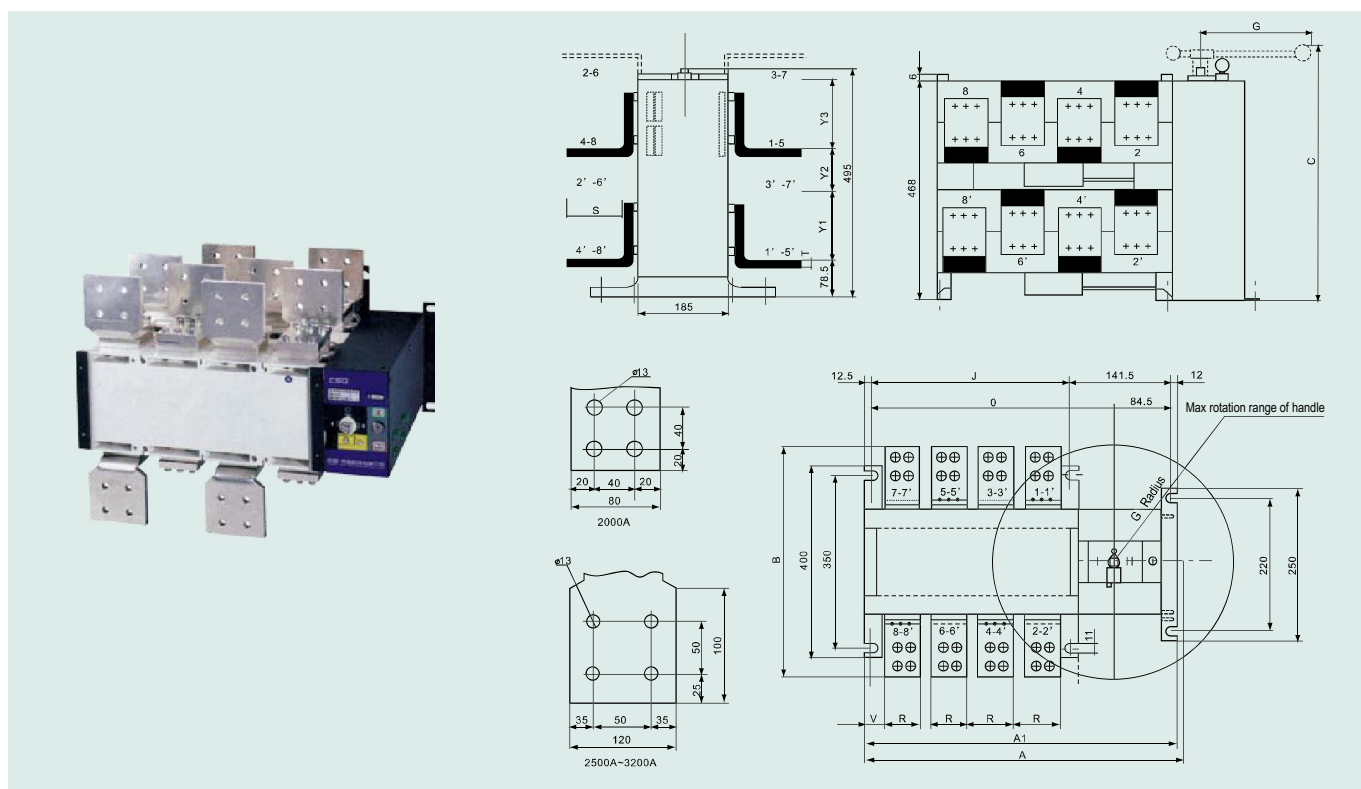


GLOQ1

Automatic Transfer Switching

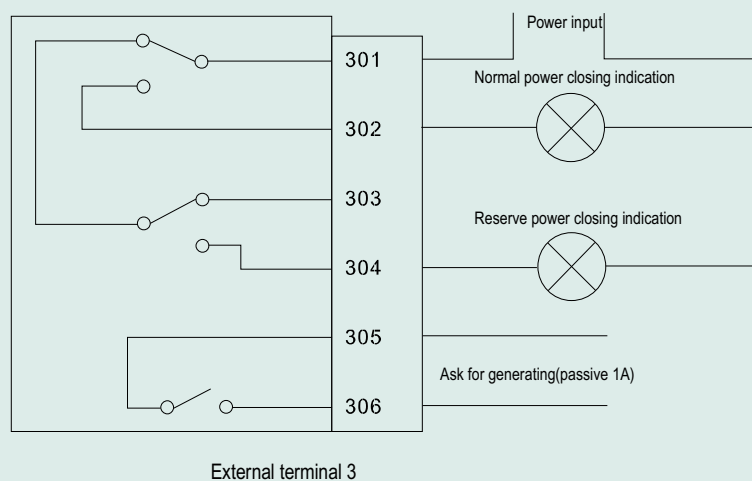
规格	A	A1	B	B1	C	E	G	J	K	L	N	O	P	R	S	T	U	V	W	ΦX	Y	Y1	K1
125A/4	406	320	135	134	261	208	192	295	78/108	7	87	207	36	20	25	3.5	134	33.5	155	9	56	141	63/93
160A/4	406	320	135	134	261	208	192	295	78/108	7	87	207	36	20	25	3.5	134	33.5	155	9	56	141	63/93
200A/4	446	380	170	134	261	208	192	365	78/108	7	87	266	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

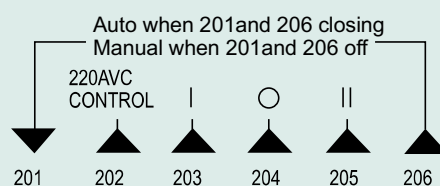
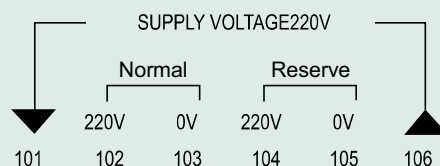


	Overall size							Installation for switch					Connecting terminal										
规格	A	A1	B	C	E	G	H	J	K	L	N	O	P	R	S	T	U	V	W	X	Y1	Y2	Y3
2000A	1007	633	455	556		470		467				524		80	80	15		33			147	84	147
2500A	1007	633	455	556		470		467				524		120	112	15		13			152	79	152
3200A	1007	633	505	556		470		467		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

GLOQ1-125-3200 basic type terminal wiring diagram



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

