

YCQ6 series


AUTOMATIC TRANSFER
SWITCH (ATS)

OPERATION INSTRUCTION

Standard: IEC 60947-6-1

CNC

Deliver
Power For Better Life

-  Before installing and using this product, please read this manual carefully and pay more attention to safety.

Notice:

Before you operate this Automatic transfer switch (hereinafter ATS), please read and understand these instructions carefully.

Dangerous

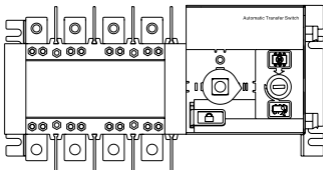
- ▲ Before you install or operate the ATS, please read and understand these instructions carefully. Only the professional ATS personnel can carry out this installation, adjustment, repair and maintenance.
- ▲ Many parts of the ATS, including printed circuit boards, when it work on-line voltage, cannot touch these parts. Use insulated tools only.
- ▲ Do not touch the components which not protected.
- ▲ Before maintenance the line of ATS, we should take the following preventive measures:
 - Disconnect all power.
 - Put a "prohibited closing" signs before the locate of the switch
 - S witch to "0" position and then hang padlock.

Warning

Inconsistent with the line voltage:

Before Power and configuration for the ATS , we must ensure the line voltage is in the scope of the power supply voltage in the name plate of the ATS If the line voltage and power supply voltage range is different ,it will damage the ATS.Using it not according to the instructions it will damage the equipment.

Check and install

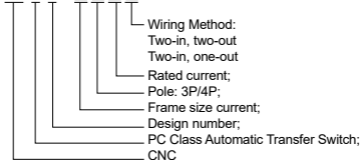


Picture 1

- **ATS delivery**
Check and make sure the product is the ordering products.
- **Check the voltage**
Check and make sure the voltage and the working voltage of the ATS.
Whether it is in the scope of the voltage.
- **Install the ATS**
Install the ATS according this manual instruction.
Install all the external accessories.
- **Wiring the ATS**
Connect the bus bar of the switch which coincided with the rated current.
Connect the control wire and outside indication well according to the manual instruction.

1. Type designation

YC Q 6 - □ □ □ □

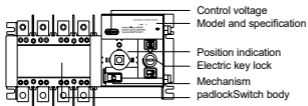


2. Main technology parameters

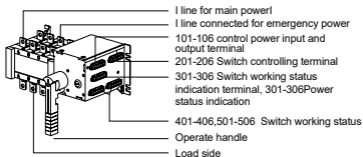
Frame class	100									160		250	
Rated current In(A)	16	20	25	32	40	50	63	80	100	125	160	200	250
Rated insulation voltage(Ui)	500V												
Rated concussion withstand voltage (Uimp)	6kV												
Rated working voltage(Ue)	AC440V												
Using category	AC-33iB												
Rated short-circuit connection capacity	8KA									17KA			
Rated short-time withstand current(Icw)	5KA/30ms									10KA/60ms			
Transfer time I-II or II-I	≤3s												
Control voltage	AC230V												
Rated frequency	Start	20W									325W		
	Normal										62W		

Frame class	630			1600				3200		
Rated current In(A)	400	630	800	1000	1250	1600	2000	2500	3200	
Rated insulation voltage(Ui)	800V									
Rated concussion withstand voltage (Uimp)	8kV									
Rated working voltage(Ue)	AC440V									
Using category	AC-33iB									
Rated short-circuit connection capacity	17KA			67KA						
Rated short-time withstand current(Icw)	10KA/60ms			16KA/60ms						
Transfer time I-II or II-I	≤5s									
Control voltage	AC230V									
Rated frequency	355W		400W	440W			600W			
	74W		90W	98W			120W			

3. Switch structure explain



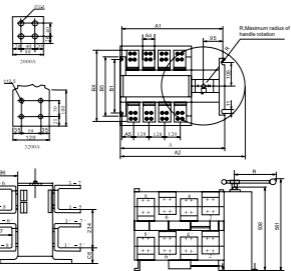
Picture 2



Picture 3

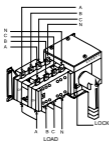
- ① . Electric key lock:Control the inside controlling line power supply of the switch,when the Electric lock open,the switch could be operated automatically and remotely, when the electric lock closed,the switch could be operated by handle only.
- ② . Operating handle: When operate the switch by the operating handle, the electric lock must be closed.
- ③ . Mechanic padlock:When inspection,firstly turn the switch to the"0" position by operation handle,then pull the padlock mechanism and close the padlock,then the inspection can be arranged:(Pull the mechanism padlock will cut off the inside controlling power supply of the switch.The switch couldn't be inelectric position and also

Installation dimensions(2000~3200A)

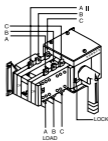


Specification	A	A1	A2	A4	A5	Bx	B1	B5	B6	B7	C6	R
2000A/3P	534	493	855	80	15	446	220	250	123	94	102	438
2000A/4P	649	608	970	80	15	446	220	250	123	94	102	438
2500A/3P	534	493	855	80	20	460	220	250	128	94	102	438
2500i4P	649	608	970	80	22	460	220	250	128	94	102	438
3200A/3P	534	493	855	120	28	496	220	250	147	112	105	438
3200i4P	649	608	970	120	28	496	220	250	147	112	105	438

5. Manual instruction

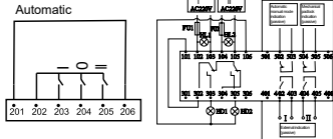


4P Wiring diagram



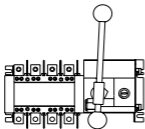
3P Wiring diagram

6. External terminal wiring diagram

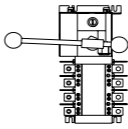


- HL1 is a common power source incoming call indicator;
- HL2 is used as a backup power source to indicate;
- HD1 is a common power input indicator, and HD2 is a backup power input indicator;
- FU1 and FU2 are 2A fuses;
- 101~106, 201~206, 301~306 are switch terminals.
- 401-406 and 501-506 are switch terminals

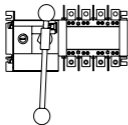
7. Correct installation method of the switch



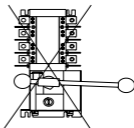
Picture 19



Picture 20



Picture 21



Picture 22

19,20,21 is correct, 22 is incorrect

8. Wiring methods of the switch

- 8.1. The primary wiring diagram to see the picture 3.
- 8.2. The control power is derived from normal power, emergency power and N phases.
- 8.3. I and II line control power AC220V connected with terminal 102~103, 104~105 respectively, 102 and 104 are normal power and emergency power live line respectively.
- 8.4. Terminal 101, 106 are act as signal lamp to control the

power supply. Note:101 and 106 couldn't be connected with any other lines.

- 8.5. When above(under) input line, under(above)terminal I and II line A,B,C phases will be connected with copper lines or lines acting as output.

9. The instruction of debug the switch

- 9.1. 9.1 Connect the normal power(I),emergency power(II) to the corresponding copper bar respectively;

① . Automatic debugging

Normal power supply with electric,emergency power supply with Electric,switch III line switch on

Normal power supply without electric,emergency power supply with electric,switch

II switch on

Normal power supply with electric,switch II line switch on

(Refer to the switch panel white indicating arrow-head)

② . Remote debugging

Press the bush button SB1,then the switch III line switch on

Press bush button SB2,then the switch II line switch on

③ . Automatic/Remote(Manual)debugging

When dial the function selection switch to the automatic position: the switch should act as the ① item required

When dial the function selection switch to the remote (manual) position, the switch should act as the ② item required

- 9.2. When the switch is in the position of switch on III line or II line,the signal lamp on the panel should indicate

correspondingly;

- 9.3. After finished the debugging,close the power supply firstly,and transfer the switch to the "0"position by handle.(Middle position,refer to the switch panel white indicating arrowhead).



CERTIFICATE

Product Model : YCQ6 series

Standard : IEC 60947-6-1

Inspector : CNC 001

Production date: Printed on the product
or package.

This product is qualified according
to the delivery inspection

CNC ELECTRIC

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CNC

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