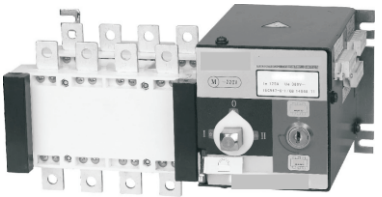
□□□ Series Automatic Transfer Switch

Operation instructions

□□□□ Series Automatic Transfer Switch



One Type and meaning

□□□□ -□/□·□

- The type of control(I、II、III)
- The poles number ofthe switch（3、4）
- Rated current(20A-3200A)
- Double power automatic transfer switch

Ten Debug instruction of the switch

1.Connect the common power(Ⅰ) and the backup power(Ⅱ) to correspond copper rod.

①Full automatic debug

The common power alive, the backup power alive, the circuit “Ⅰ” put through

The common power lose the power, the backup power alive, the circuit “I”ut through

The common power coming alive, the circuit “Ⅰ” put through

(see the white indicating arrow of switch panel)

②Remote control debug

Inching button SB1, the circuit “Ⅰ” put through.

Inching button SB2, the circuit “Ⅱ” put through

③Automatic/remote control (hand) debugTurn the function option switch to automatic position:

The switch should according to therequirements of ①.

Turn the function option switch to remote control (hand) position: The switch should according to the requirements of ②.

2.When the switch in the state of circuit “Ⅰ” or circuit “Ⅱ” putting through, the signal led should do corresponding indicating.

3.After debug, close the power first, and use the handle to turn the switch to position “0”.

(The middle position, please see the white in dicating arrow of switch panel)

Nine The instruction of Switch wiring

(See right installing methodA)

1.The switch from left to right, circuit “ Ⅰ ” and “Ⅱ” connect to common power separately (front). The backup power (rear) phase A, B,C.
2.Control power from common power, backup power phase C and phase N.
3.Circuit “Ⅰ” and “ Ⅱ ” control power AC220v connect to terminal 102-103 and104-105 separately, that 102 and 104 is common power, backup power and alive wire of backup power.
4.Terminal 101 and 106 only as signal led control power, 106 is alive wire

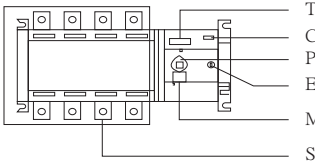
Note: 101 and 106 cann't connect to any wire.

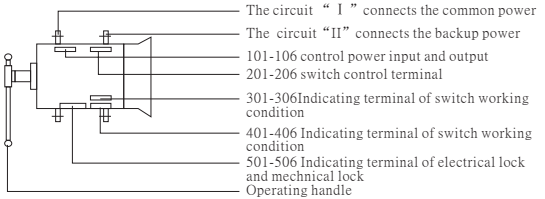
5.When the upper (below) being coin in, the below (upper) terminal ,ciricut phase “ Ⅰ ” and “ Ⅱ ” A,B,C and N connected to copper rod or conductor as output.

Two Main technical parameter

Promissoryheat currentITH		20A	40A	63A	80A	100A	125A	160A	250A	400A	630A	800A	1000A	1250A	1600A
Ratedinsulating voltageUi		750V								1000V					
Ratedconcussion endurance voltageUIMP		8KV								12KV					
Rated operating voltage Ue		AC440V													
Rated Operating Current Ie	AC-31A	20	40	63	80	100	125	160	250	400	630	800	1000	1250	1600
	AC-35A	20	40	63	80	100	125	160	250	400	630	800	1000	1000	1600
	AC-33A	20	40	63	80	100	125	160	250	400	400	630	800	800	1000
Ratedputthrough capability		10Ie													
Ratedbreaking capability		8Ie													
Ratedlimitation short circuitcurrent		100KA								70KA			100KA	120KA	
Ratedshort time endurance currentIS		7KA						9KA		13KA		26KA	50KA		
Switch time I-IIorII-I		0.45S								0.6S		1.2S			
Electriccontrol powervoltage		DC24V、48V、110V								AC220V					
Electrical consume															
Rated Control Voltage	Start-up	300W						325W		355W		400W	440W		
	Normal	55W						62W		74W		90W	98W		
Weight（kg） 4poles		7.0	7.2	7.2	7.2	7.5	7.5	8.8	9.0	16.5	17	32	36	40	43

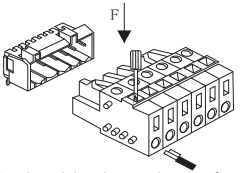
Three Structure specification of switch

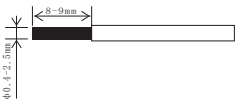




1. Electrical key lock: control the inner of the switch and control the circuit power, when the the electrical lock unlocked, it can automatic and remote control, when the electrical locked, the switch can only operate by handle.
2. Operating handle: When use the operating handle control the
★ switch, should lock the electrical lock.
3. Mechnical padlock: When maintence, first, use the operating handle to make the switch on “O” position, pull the padlock and get into lock, then to maintence.(pull the padlock, should put off the inner control power of the switch, the switch cann't electromotive, and also cann't by hand)
4. Position indicating: indicate the operating position of the switch (Ⅰ ,0, Ⅱ)
5. Control voltage: the grade of the control voltage 220VAC, 24VDC, 48VDC, 110VDC and 220VDC
6. The main body of the switch: The front part is circuit “I”,, connect to common power,the rear part is circuit “II”, connect to backup power.

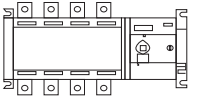
Seven Operating method of terminal wiring



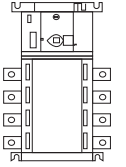


Begin with minuscule, put force according to the chart, insert the wire according to the chart.

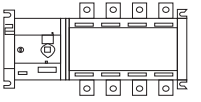
Eight The right installing method of switch



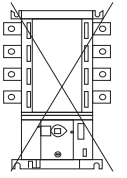
(A)



(B)



(C)

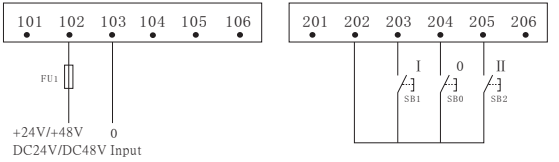


(D)

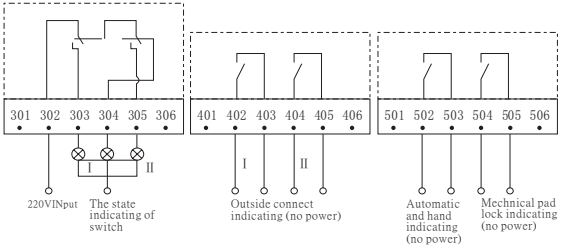
(A)(B)(C) Right (D) Error

Six DC24V/DC48V wiring method

1.The basic wiring manner

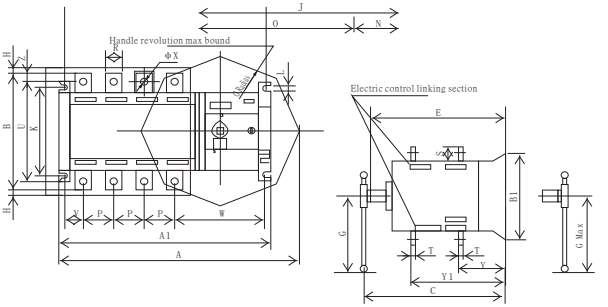


2.Other terminal wiring



Note: The dotted line frame is the inner accessory contactor of □□□□ switch

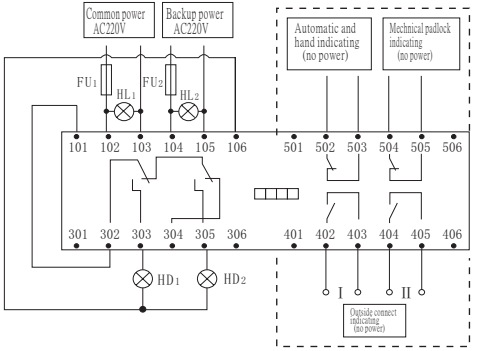
Four Installation dimension

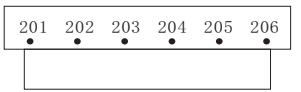


Specification	Total dimension								Switch installing								Wiring terminal					
	A	A1	B	B1	C	E	G	H	J	K	L	N	O	P	R	S	T	U	V	W	ΦX	Y	Y1	Z
20A	435	303	135.5	135	251	195	190	30	280	95/110	7	86	194	36	20	25	3.5	130	20	152	9	58	136.5	8
40A	435	303	135.5	135	251	195	190	30	280	95/110	7	86	194	36	20	25	3.5	130	20	152	9	58	136.5	8
63A	435	303	135.5	135	251	195	190	30	280	95/110	7	86	194	36	20	25	3.5	130	20	152	9	58	136.5	8
80A	435	303	135.5	135	251	195	190	30	280	95/110	7	86	194	36	20	25	3.5	130	20	152	9	58	136.5	8
100A	435	303	135.5	135	251	195	190	30	280	95/110	7	86	194	36	20	25	3.5	130	20	152	9	58	136.5	8
125A	435	303	135.5	135	251	195	190	30	280	95/110	7	86	194	36	20	25	3.5	130	20	152	9	58	136.5	8
160A	453	359	160	135	251	195	190	30	339	95	7	86	253	50	25	30	3.5	130	27	162	11	60.5	136.5	15
250A	453	359	160	135	251	195	190	30	339	95	7	86	253	50	25	30	3.5	130	27	162	11	60.5	136.5	15
400A	525	433	260	228	319	262	190	25	413	180	9	89	324	65	40	50	6	201	37.5	180.5	13	82.5	192.5	20
630A	525	433	260	228	319	262	190	25	413	180	9	89	324	65	40	50	6	201	37.5	180.5	13	82.5	192.5	20
800A	1007	633	330	250	370	321	470	70	609	220	11	85	524	120	63	60	6		60.5	188.5		106	248	
1000A	1007	633	330	250	370	321	470	65	609	220	11	85	524	120	63	65	7		60.5	188.5		107	249	
1250A	1007	633	330	250	370	321	470	65	609	220	11	85	524	120	63	65	7		60.5	188.5		107	249	
1600A	1007	633	330	250	370	321	470	50	609	220	11	85	524	120	80	80	15		60.5	188.5		111	253	

Five Operation guide

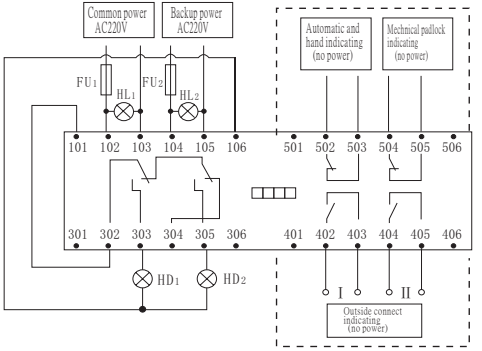
1.The full automic wiring manner

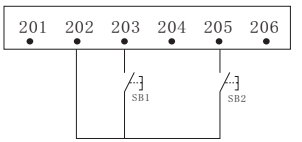




- Hl1 is the alive indicating of the common power
  HL2 is the alive indicating of the backup power
- HD1 is the using indicating of the common power
  HD2 is the using indicating of the backup power
  FU1-FU2 are the fuses with 2A
- 101-106, 202-206, 301-306 are switch terminals of □□□□
- 401-406, 501-506 are optional switch terminals

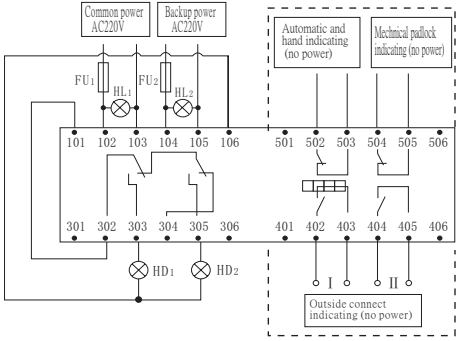
5. Remote control wiring manner



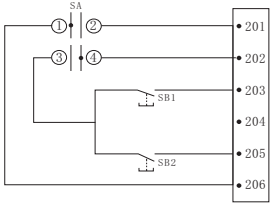


- SB1, SB2 is using by hand button of common power and backup power (contactor without power)
- 401-406,501-506 are optional switch terminals

4. Full automatic+hand (remote control) wiring manner

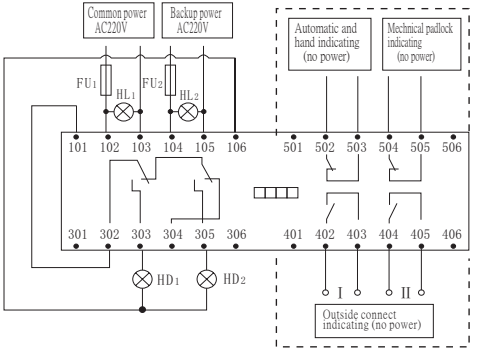


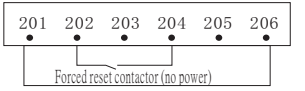
Automatic, hand and remote



- SA is the optional switch of automatic/hand function.
- Sb1, SB2 is using by hand button of common power and backup power (contactor without power)
- 401-406,501-506 are optional switch terminals.

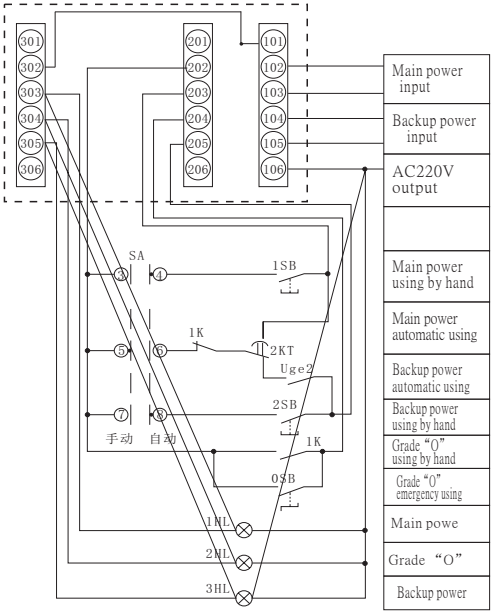
2. Full automatic+forced reset wiring manner (the double power should be turn off)

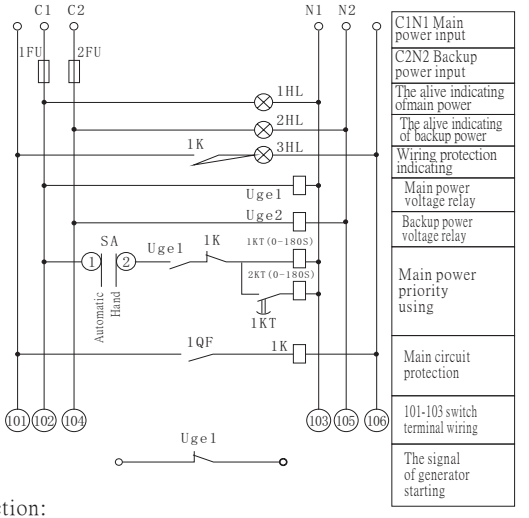




- Hl1 is the alive indicating of the common power
  HI2 is the alive indicating of the backup power
- HD1 is the using indicating of the common power
  HD2 is the using indicating of the backup power
  FU1-FU2 are the fuses with 2A
- 101-106, 202-206, 301-306 are switch terminal of □□□□
- 401-406, 501-506 are optional switch terminals

3. The wiring manner of the generator





Instruction:

101-106 are terminals of switch power input and output

- 201-206 are switch control terminals
- 301-306 are indicating terminals of switch state
- 1QF is the alarm contactor of switch protection of main circuit (main power)
- 1KT is passing time delay(0-180s), 2KT is power-off time delay (0-180s)