Product certificate

Product name Dual power automatic transfer switch

Inspector: 02

Production Date:

Meet the standard :GB/T14048.11
IEC60947-6-1

This product is approved for delivery after passing the inspection

Dual power automatic transfer switch

In order to better use this product, please read this manual carefully before use

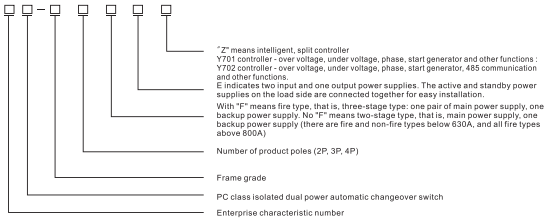
Instruction manual

Meet the standard :GB/T14048.11
IEC60947-6-1
Electrical level :PC
Usage Category :AC-33B

1. Introduction to the switch

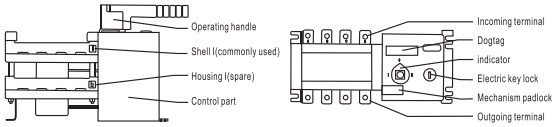
Automatic transfer switch (ATSE) is a set of switch and logic control in one, truly realize the mechanical and electrical integration of the automatic transfer switch, it is suitable for AC 50Hz, rated voltage to 440V, the agreed heating current to 1600A power distribution equipment. With voltage detection, communication interface, electrical and mechanical interlock and other functions: can achieve automatic, remote control, forced "0", emergency manual operation, widely used in the power supply system of the main power supply and standby power supply automatic conversion or automatic conversion and safety isolation of two load equipment. The switch is controlled by the circuit board to issue a variety of logical commands to manage the motor, and the motor drives the operating mechanism of the main part of the switch to quickly connect the breaking circuit or perform circuit conversion, and achieve safety isolation through the obvious visible state.

2. Model and meaning



3. the switch structure description

1, electric key lock: control switch internal control line power supply, when the electric lock is opened, the switch can achieve automatic, operational control, strong "0" operation: when the electric lock is closed, the switch can only be manually operated.
2. Operating handle: When manually operating with the operating handle, the electric lock must be closed first.
3, the mechanism padlock: special maintenance, that is, first use the operating handle to make the switch in the "0" stop position, and then pick up the padlock mechanism and padlock, can be repaired (pick up the padlock will cut off the internal control power supply of the switch, the switch can not be automatic, and can not achieve manual).
4, indicator: indicates the working status of the switch position (I, 0, II).

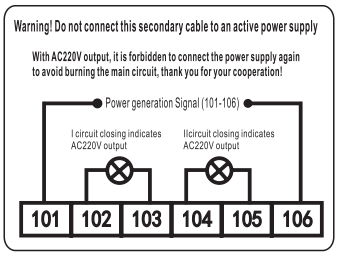


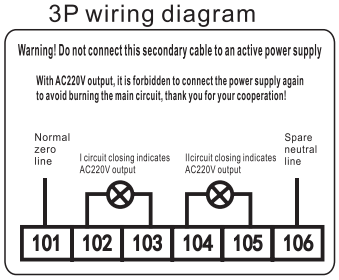
4. Main technical parameters

1. Meet the standard :GB/T14048.11
2. Rated operating voltage (Ue); AC440V;
3. Rated connecting capacity (ARms):10Ie;
4. Rated breaking capacity (ARms):8Ie;
5. Control power supply voltage :DC24V, 48V, 110V,AC220V

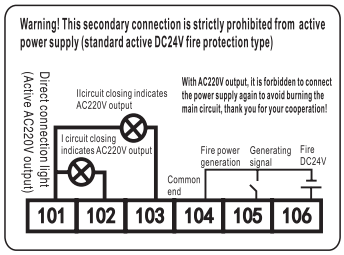
8. Basic wiring diagram (active AC220V output)

3P wiring diagram





9.Fire type wiring diagram (active AC220V output)



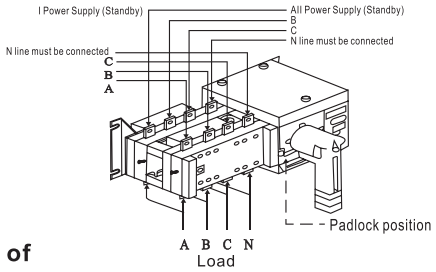
(Active AC220V output)

Note: Split controller (right picture)

Intelligent split controller (line length can be adjusted at will, the general length is 1.5-2 meters) has overvoltage protection, undervoltage protection, lack of phase protection, self-recovery, self-recovery, starting the generator, fire, liquid crystal display, 485 interface and other functions.

Rated heating current (A)		100	160	250	400	630	1000	1250	1600	2000	2500	3200
Rated insulation voltage		750V					1000V					
Rated impulse withstand voltage		8KV					12KV					
Rated operating current (A)	AC-31A	100	160	250	400	630	1000	1250	1600	2000	2500	3200
	AC-35A	100	160	250	400	630	1000	1250	1600	2000	2500	3200
	AC-33A	100	160	250	400	630	1000	1250	1600	2000	2500	3200
Rated short-time withstand current		7KA	9KA		13KA			50KA				55KA
Rated limited short circuit current		100KA			70KA		100KA	120KA		80KA		
Control supply voltage		DC24V、48V、110V AC220V										
Conversion time (S)		0.5	1	1.1	1.2		1.25			2.45		

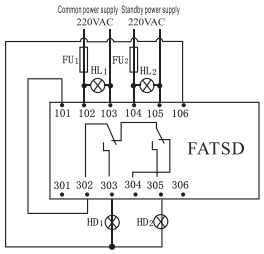
5, Wiring diagram

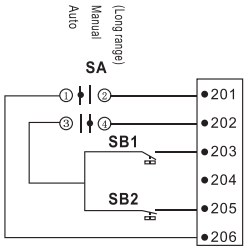


6, The use of

(1) Switch function
1, automatic function: when the common power supply is cut off, the switch automatically switches to the standby power supply; When the usual power supply returns to normal, the switch automatically returns to the usual power supply.
2, strong "0" function: start the strong "0" button, the switch will cut off the dual power supply. Remote control function: that is, remote control, press the "" button; The commonly used power supply
3, do; Press the "II" button, then the standby power supply works; Press the "0" button to cut off both power supplies.
4, please select the switch function according to the need, and wiring according to the corresponding function.
5, please specify the switch model, current specifications and required functions when ordering.

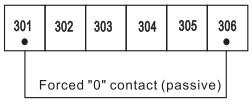
5, automatic + manual (remote control) wiring mode

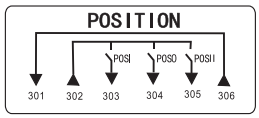




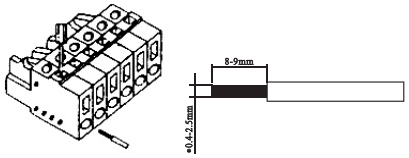
6. Letter and symbol description
1)C1 and N1 are the common power supply live line and neutral line respectively, C2 and N2 are the standby power supply live line and neutral line respectively. HL1 and HL2 are the common power supply and the standby power supply respectively. HD1, HD2, HD3 are the common power supply, standby power input indicator and fire (double) indicator respectively. FU1 and FU2 are 2A fuses.
2)101–106 and 201–206 are automatic conversion secondary terminals.
3)301–306 is the automatic switch external indicator terminal.
4) Automatic wiring mode 201, 206 must be short–circuited.
5) Forced "0" contact (passive) can also input DC24V power supply.
6)K1 is the output of the power generation signal (when commonly used out of power).
7)SA is the automatic/manual function selection switch, SB1, SB2 are the common power supply, standby power manual input button (passive contact)

7. Isolate a terminal fire (passive)



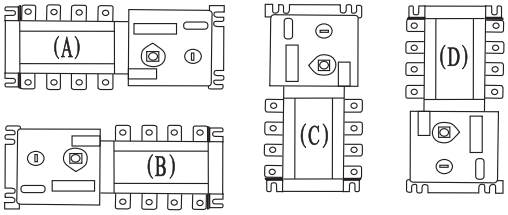


7, terminal wiring operation method



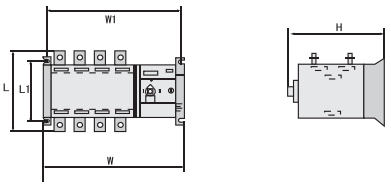
Use the screw driver use force downwards as the picture indicated direction,the line imbedding as the picture shows.

8, the correct installation method of the switch



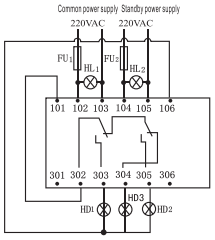
（A） （B） （C）correct （D）incorrect

9. Appearance and installation size (plastic)

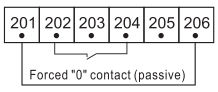


Type specification	Overall dimensions (L x W x H)			Mounting dimensions (L x W)	
	W	L	H	W1	L1
100/4P	252x115x125			140x78	
160/4P	315x145x150			300x107	
250/4P	383x175x165			370x107	
400-630/4P	445x270x225			427x173	

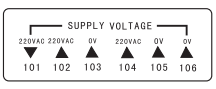
3. 100A(fire type)~3200A automatic + forced "0" (both power supplies are disconnected) Connection mode:

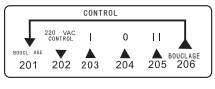


101 and 106 have active output AC220V

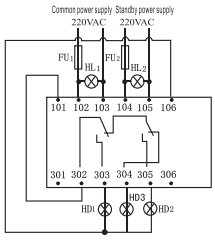


4, 100A(fire type)~3200A terminal mark:

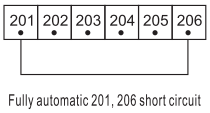




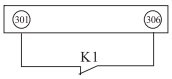
5, 100~3200 automatic + generator signal output wiring mode:



101 and 106 have active output AC220V

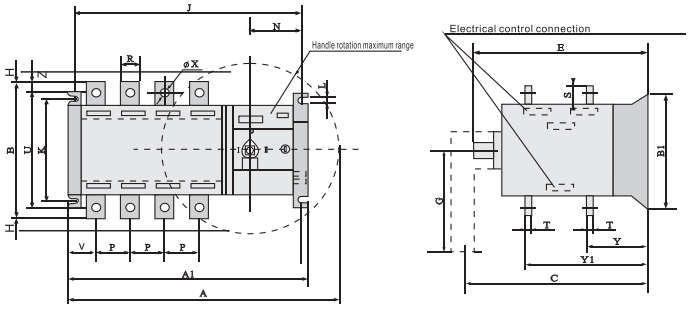


Fully automatic 201, 206 short circuit



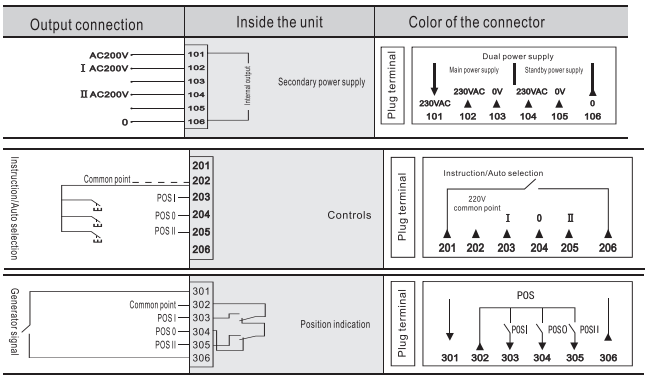
Commonly used when no power generation signal output

10. Appearance and mounting dimensions (iron)

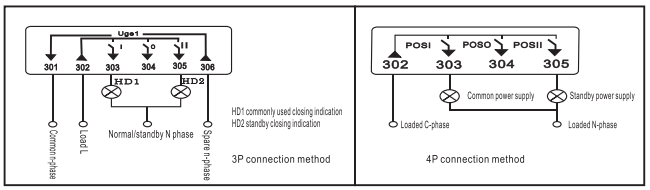


specification	Overall dimensions and mounting dimensions																					
In	A	A1	B	B1	C	E	G	H	J	K	L	N	O	P	R	S	T	U	V	φX	Y	Y1	Z
100A/3	235	232	120	105	150	145	115	19	222	82	7	83	142.5	30	14	18	2.5	103	13	6	41.5	93	2
100A/4	280	244	120	105	150	145	115	19	230	82	7	83	142.5	30	14	18	2.5	103	13	6	41.5	93	2
160A/3	292	270	140	142	213	153	145	10	254	107	7	93	192	36	20	25	3.5	127	21	9	55.5	127	4
160A/4	360	300	156	142	213	153	145	10	285	107	7	93	192	36	20	25	3.5	127	21	9	55.5	127	4
250A/3	356	312	170	142	216	180	145	6	293	107	7	93	250	50	25	28	3.5	141	29	11	58	131	9
250A/4	420	370	175	142	216	180	145	6	358	107	7	93	250	50	25	28	3.5	141	29	11	58	131	9
400A/3	530	370	245	222	286	250	245	20	365	173	9	97	268	65	32	37	5	222	38	11	83	193	6
400A/4	590	436	245	222	286	250	245	20	420	173	9	97	328	65	32	37	5	222	38	11	83	193	6
630A/3	530	370	245	222	286	250	245	20	365	179	9	97	268	65	40	45	6	222	38	11	83	193	14
630A/4	590	436	245	222	286	250	245	20	420	173	9	97	328	65	40	45	6	222	38	11	83	193	14
800~1000A 3P	785	520	380	250	351	340	360	20	503	220	11	88	415	120	60	64	8	250	59	13	109	254	39
800~1000A 4P	1080	634	380	250	351	340	540	20	613	220	11	88	529	120	60	64	8	250	59	13	109	254	39
1250~1600A 3P	785	520	380	250	351	340	360	20	503	220	11	88	415	120	80	68	8	250	59	13	110	255	43
1250~1600A 4P	1080	634	380	250	351	340	540	20	617	220	11	88	529	120	80	68	8	250	59	13	110	255	43
2000A/3	785	535	405		560	480	360		408	220													
2000A/4	1080	650	405		560	480	540		615	220													
2500A/3	785	535	405		560	480	360		408	220													
2500A/4	1080	650	405		560	480	540		615	220													
3200A/3	785	535	405		560	480	360		408	220													
3200A/4	1080	650	405		560	480	540		615	220													

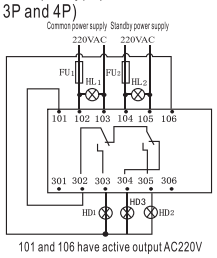
11, external terminal wiring diagram (passive type)



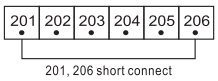
1, non-fire type wiring method (3P and 4P):Below 630A(including 630A) there are two types of fire protection and non-fire protection, and 630A(excluding) are all fire protection types



2, 100A(fire type)~3200A automatic conversion wiring method (the following are all applicable to 3P and 4P)



101 and 106 have active output AC220V



201, 206 short connect