

AIJES

**AIJES-ATS**  
DUAL POWER AUTOMATIC  
TRANSFER SWITCH



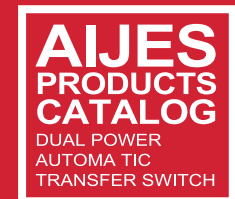
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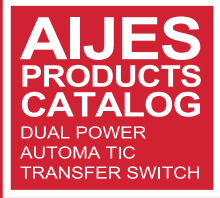
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FEITENG

AIJES PRODUCTS CATALOG







## COMPANY PROFILE

Suzhou FEITENG Electric Co.,LTD. was founded in 1994, is a Taiwan-owned FEITENG Electric Co., LTD. in the mainland to set up a low-voltage electrical business. The company is located in Suzhou, Wuxi, Changshu intersection - North Town, Suzhou is only three kilometers away from the beltway, geographic location.

After ten years of experience in the development, Suzhou FEITENG Electric has grown (dual power automatic transfer switch) is the largest one of the manufacturers of PC-class ATS. Company employees 150 people, including engineering staff of nearly 20 percent, more than 80 percent of college and higher education staff of the total engineering manpower, the factory area 11,250 square meters, which is the company's fast, robust, innovation and sustainable development a solid guarantee.

The company has long been engaged ATS dual power automatic transfer switch, ATS controllers, residual current monitoring system, fire detection, molded case circuit breakers, miniature circuit breakers, earth leakage circuit breakers and Circuit Breaker and other low-voltage electrical and electronic equipment development and production manufacturing, complete specifications, comprehensive product that can meet the needs of each user. The company now has injection workshop, stamping workshop, mold shop, spot welding workshop, electronics workshop and various product assembly workshop, advanced manufacturing equipment, including 20 sets of spot welding, punching, equipment, vehicles, milling metal processing equipment more than 30 Taiwan, as well as the electrical properties of test equipment, product life test equipment, measuring and testing equipment, product aging test chamber, and electrical properties laboratory.

We follow the "careful planning, strict control, the pursuit of a better, to provide customers with the desired products and services," the quality policy, the establishment of a sound quality assurance system, through the "ISO9001-2008" quality system certification, and has made Suzhou City "Consumer confidence enterprise" and Suzhou City Electric Industry Association, "executive director units," the glorious title. The company also established a nationwide sales and service network, and in good faith, the Three Guarantees products, commitment to the province two days in the province one day on-site service.

Suzhou FEITENG Electric Co., Ltd. Mr. Huang Zheyong staff welcome business colleagues at home and abroad to visit our company, study, business negotiations, let us hand in hand, a win-win for a better tomorrow!

# AIJES

## Product Catalog

DUAL POWER AUTOMATIC TRANSFER SWITCH

- W series dual power automatic transfer switch
- W2H series dual power automatic switch
- W2R series dual power automatic switch
- WNA series dual power automatic switch
- WNP series dual power automatic switch
- WNB series dual power automatic switch
- WST-5 Series of controllers
- WST-6 Series of controllers (Compact)
- WST-8 Series of controllers

AIJES

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DUAL POWER AUTOMATIC  
TRANSFER SWITCH

## Normal operating conditions and installation conditions

Products meet GB14048.11 and IEC60947-6-1 "low-voltage switchgear and control equipment - Part 6-1: multi-function electrical automatic transfer switching equipment).

1) ambient air temperature

The upper limit of not more than + 40 °C; lower limit of not less than -5 °C, 24h average does not exceed 35 °C.

2) elevation

The installation site altitude does not exceed 2000m.

3) atmospheric conditions

Air installation location relative humidity at the highest temperature + 40 °C when not more than 50%; at a lower temperature allows a higher relative humidity, the monthly average minimum temperature does not exceed the wettest month + 25 °C, the average maximum for the month relative humidity less than 90%, as a result of temperature changes on the surface of condensation situation must be taken.

4) Degree of pollution

Contamination class in accordance with 3 GB / T14048.1 regulations.

5) Installation category

Switch electrical installation category III class conform GB / T14048.1 prescribed switching controller comply with installation category II class GB / T14048.1 regulations.

6) Installation conditions

Electrical switches and switching controller can be mounted vertically or horizontally installed in a dedicated control cabinet or distribution cabinet.

7) Use category

Table 1

The main circuit	AC-33B(Infrequent operation )	Motor load or contain motors, resistive load and mixed load of 30% or less of incandescent loads
Auxiliary circuit and turn control appliances	AC-15	AC load control solenoid
	DC-13	Load control solenoid

8) The control circuit

Rated electrical switches and switching controller controls the supply voltage  $U_s$  AC 220V / 230V / 50Hz, Proper working conditions is to control the supply voltage value should be  $\geq 85\% U_s$ , and  $\leq 110\% U_s$ .

9) auxiliary circuit

Auxiliary circuit with auxiliary contacts, of which the structure is electrically separable, four normally open, Four normally closed. Auxiliary contact ratings in Table 2.

Table 2

Rated thermal current $I_{th}(A)$	Rated insulation voltage $U_i(V)$	Rated operational current $I_e$ (A)	
		AC220V	DC200V
10	300	3	0.2

Auxiliary contact Abnormal making and breaking capacity in Table 3.

Table 3

Category	Connect			Section			Operating frequent rate and the number of cycles		
	$I/I_e$	$U/U_e$	$\cos\Phi$ or $T_{0.95}$	$I/I_e$	$U/U_e$	$\cos\Phi$ or $T_{0.95}$	Cycles	Operating frequency Beats / min	Power-on time (s)
AC-15	10	1.1	0.3	10	1.1	0.3	10	2	$\geq 0.05$
DC-13	1.1	1.1	6Pe	1.1	1.1				
Note: $T_{0.95}$ ceiling $\approx 6Pe \leq 300ms$ . DC-13 power-on time when more than 0.05s $T_{0.95}$ least $T_{0.95}$ .									



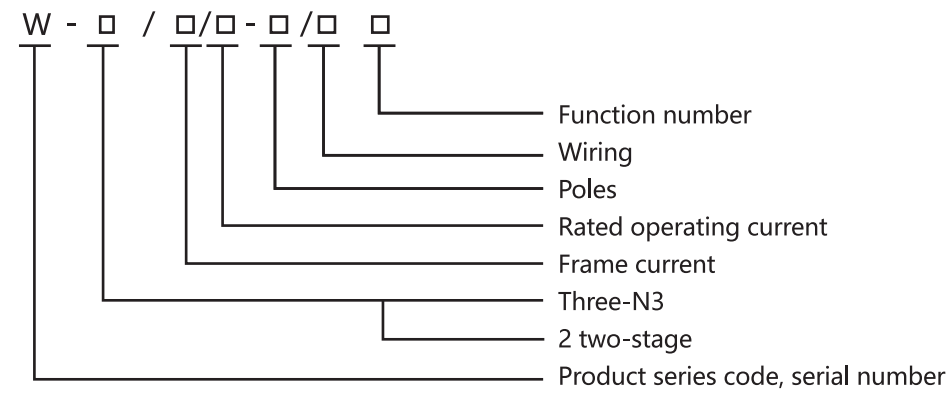
# W Series

## DUAL POWER AUTOMATIC TRANSFER SWITCH



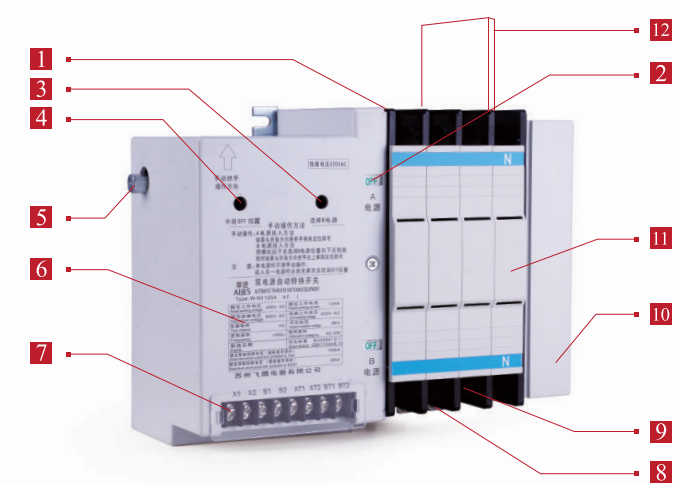
- ▶ W series dual power switching equipment belonging PC level, it points to W2 W-N3 two.
- ▶ W-2 for the two-stage automatic transfer switch, when the switch is connected to the switching signal does not stop in the middle of the open position immediately switched to the other power supply, current specifications for a 500A 20A from a power supply.
- ▶ W-N3 for the three-stage automatic transfer switch, the switch after receiving the converted signal can be immediately (or after a predetermined delay time) from a transducer connected to another power supply, you can pick from a power exchange to any intermediate position does not disconnect the power interlinked. 20A current specifications for a 5000A.

### Product code and meaning



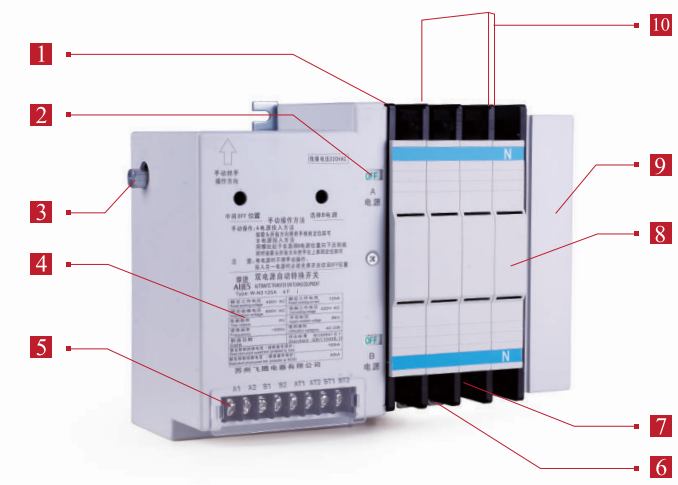
### W-N3 three-stage automatic transfer switch (20-5000A)

1. A power supply side of the main circuit terminals
2. Power-off indicator window
3. Select button
4. Release button
5. Manually operated square shaft
6. Nameplate
7. Control power supply terminal
8. Load side of the main circuit terminals
9. B power supply side of the main circuit terminals
10. Auxiliary contact cover
11. Interrupter cover
12. Across the phase plate



### W-2 two-stage automatic transfer switch (20-500A)

1. A power supply side of the main circuit terminals
2. Power-off indicator window
3. Manually operated square shaft
4. Nameplate
5. Control power supply terminal
6. Load side of the main circuit terminals
7. B power supply side of the main circuit terminals
8. Interrupter cover
9. Auxiliary contact cover
10. Across the phase plate



### ATS switch Features

- ▶ **Reliable mechanical interlock:** a unique eccentric selection structure, to ensure that only one set of power supply, there could not be two sets of power while the access load.
- ▶ **Excellent arc performance:** a variety of abnormalities will be reliably extinguish the arc, arc duration is short, less contact loss.
- ▶ **Multi-piece main arc contacts:** contact surface contact area and increase the contact pressure, without overheating or contact welding, to extend the service life of the contacts.
- ▶ **Switching speed fast:** in between two common power supply and backup power conversion quickly with

► **ATS controller delay time can be set by the user to convert.**

Smaller structure is simple: reliable, low failure rate, installation, use, easy maintenance, maintenance operations with the slow rotation of the handle, easy to find and troubleshooting, W Series ATS belong to PC level, the volume level is smaller than the CB, and current multi-level specification than CB.  
OFF (OFF) position: W-N3-type three-stage switch can be energized to be able to convert from a short stay without any open position (OFF) power is turned on, the convenience to the user, W-2 type in this two-stage you can not open position (OFF) to stay.

Product Series		Rated operating current Ie (A)	Poles ( P )	Wiring	Function number
W-N3 W-2		20、40、63、 80 、100...	2、 3、 4	F、 B	I Standard  II Automatic type
Frame degree current IImA	63	20、40、63、	2 : Two Level 3 : Three Level 4 : Four Level	F:The front plate Wiring  B:After the board Wiring	
	125	80、100、125			
	250	160、200、225、250			
	500	350、400、500			
	800	630、800			
	1250	1000、1250			
	1600	1600			
	2500	1600、2000、2500			
	4000	3150、5000			
	5000	5000			

Note: 1) rated working voltage AC660V / 690V, and DC125V / 250V and control voltage AC100V, 110V, and DC110V, 125V and other voltage specification of switching equipment for special delivery. Shall specify when ordering.  
2) 500A and below the front panel switch is generally wiring, 500A switch is generally above the rear panel wiring, in addition to special delivery.

■ **W-2 stage switch parameters**

Model		W-2											
Insulation voltage		AC800V											
Impulse withstand voltage		8kV											
Rated voltage		AC400V(AC660V/690V、DC125V/250V)											
Frame current (A)		63			125			250			500		
Vote count		Double throw											
Wiring		The front plate											
Poles		2P	3P	4P	2P	3P	4P	2P	3P	4P	2P	3P	
Weight (kg)		4.5	5	5.5	5	6.3	6.8	6	6.6	7.3	11	15	
Operating current (A)	DC110V/125V	6	6	8	6	6	8	6	8	10	10	10	
	AC100V/110V	6	6	8	6	6	8	6	8	10	10	10	
	AC220V	3	3	4	3	3	4	3	4	5	5	5	
Performance	Short time withstand current		10kA					15kA			20kA		
	Rated conditional short-circuit current (fuse for Breaker)		50kA					65kA					
	Rated conditional short-circuit current (fuse for protection)		100kA					120kA					
	Breaking capacity		AC-33B(10IeConnect.10IeBreaking ) cosΦ = 0.35 ( Ie≤100A , cosΦ = 0.45 ) DC-33B ( 4IeConnect.4IeBreaking ) L/R = 2.5ms										
	Conversion time	A→B	≤0.2s										
		B→A											
	Use Lifetime		Electrical life of 6,000 times, the mechanical life of 20,000 times										
	Operating cycle frequency		120 times / hour										
Auxiliary switch		A, B power supply side are two normally open and two normally closed; switching capacity AC: 110V5A / AC: 220V3A DC: 200V0.2A											
Accessory		Operating handle											

■ W-N3-stage switch parameters

Model		W-N3															
Insulation voltage		AC800V															
Impulse withstand voltage		8kV															
Rated voltage		AC400V															
Frame current		63A			125A			250A			500A			800A			
Vote count		Double throw															
Wiring		The front plate												After the board (Front panel for special delivery)			
Poles		2P	3P	4P	2P	3P	4P	2P	3P	4P	2P	3P	4P	2P	3P	4P	
Weight ( kg)		5.5	5.8	6.4	6	6.5	7.2	6	7.1	7.7	11	15	18	25	38	43	
Operating current (A)	DC110V/125V	6	6	8	6	6	8	6	8	10	10	10	14	12	12	12	
	AC100V/110V	6	6	8	6	6	8	6	8	10	10	10	14	12	12	12	
	AC200V/ 220V/230V	3	3	4	3	3	4	5	5	5	5	5	6	6	6	6	
Tripping current (A)	DC110V/125V	2									3			4			
	AC100V/110V	2									3			4			
	AC220V	1									1.4			2			
Performance	Short time withstand current		10kA					15kA			20kA			25kA			
	Rated conditional short-circuit current (fuse for protection)		100kA					120kA						120kA			
	Rated conditional short-circuit current (fuse for Breaker)		50kA					65kA						50kA			
	Breaking capacity		AC-33B(10IeConnect.10IeBreaking ) cosΦ = 0.35 ( Ie≤100A时 , cosΦ = 0.45 ) DC-33B(4IeConnect.4IeBreaking ) L/R = 0.25ms														
	Time Conversion	A→B	≤0.2s														
		B→A															
	Lifetime		Electrical life of 6,000 times, the mechanical life of 20,000 times												Electrical life of 6,000 times, Mechanical life 10,000 times		
Operating cycle frequency		120 times / hour															
Auxiliary switch		A, B are two normally open power supply; switching capacity AC: 110V5A / AC: 220V3A DC: 200V0.2A															
Accessory		Operating handle															

Note:

1) direct current (DC) case operation, AC circuit and configured substantially the same. Please go to follow the exchange operating instructions.

W-N3															
AC800V															
8kA															
AC400V															
1250A			1600A			2500A			3150A			4000A		5000A	
Double throw															
After the board (Front panel for special delivery)															
2P	3P	4P	2P	3P	4P	2P	3P	4P	2P	3P	4P	3P	4P	3P	4P
37	46	55	36	54	68.6	95	115	135	110	124	140	207		265	
12	12	16	14	16	18	16	20	24	20	24	28	32	36	36	38
12	12	16	14	16	18	16	20	24	20	24	28	32	36	36	38
6	6	8	7	8	9	8	10	12	10	12	16	16	18	18	20
4						6									
4						6									
2						2									
32kA			40kA			50kA									
120kA															
50kA															
AC-33B(10IeConnect/10IeBreaking ) cosΦ = 0.35 DC-33B(4IeConnect.4IeBreaking ) L/R = 2.5ms															
≤0.2s															
Electrical life of 6,000 times, the mechanical life of 10,000 times															
120 times / hour															
A, B power supply side are two normally open and two normally closed; switching capacity AC: 110V5A / AC: 220V3A DC: 200V0.2A															
Operating handle															

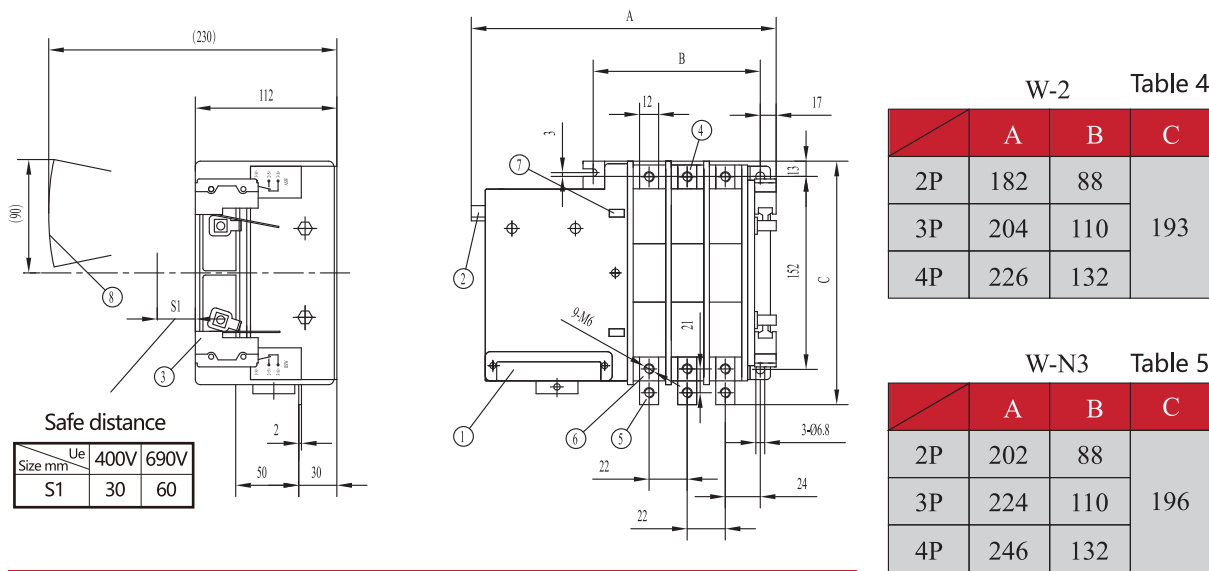
2) the weight of the table for reference purposes only.

3) short-time withstand current and operating current, the current value of the trip is for reference only.

4) 4000A and 5000A4P product, N-pole contacts capacity are 2000A, 2500A.

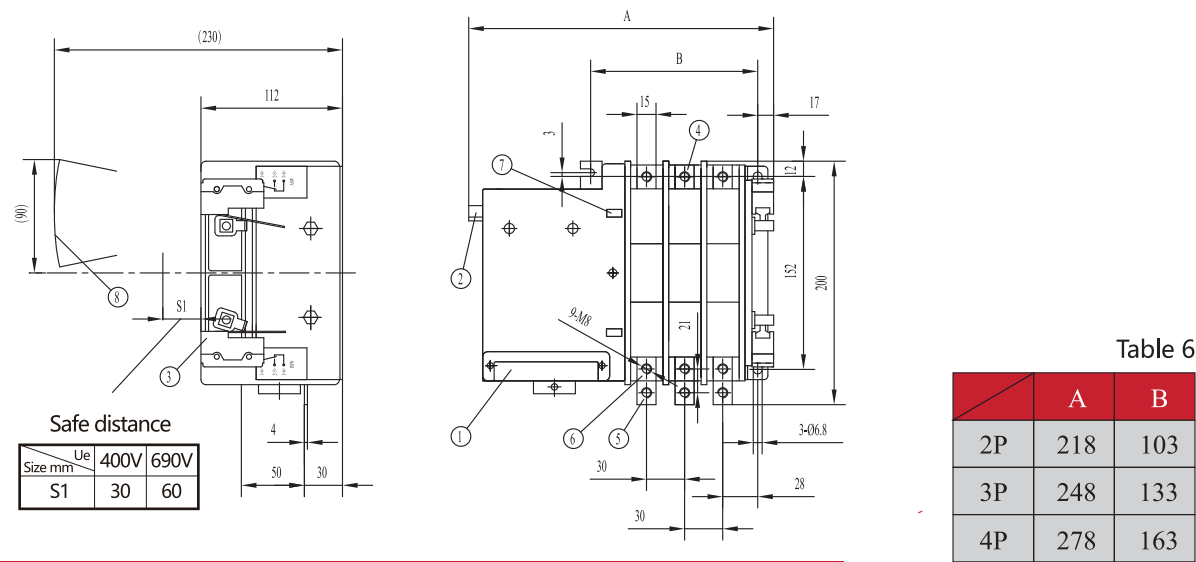
## ■ Dimensions and mounting dimensions

1) W-N3 20~63A W-2 20~63A  
Panel safe distance  
S1尺寸: 30mm(400V), 60mm(690V)



Note: The drawings A, B, C size in Table 4, Table 5.

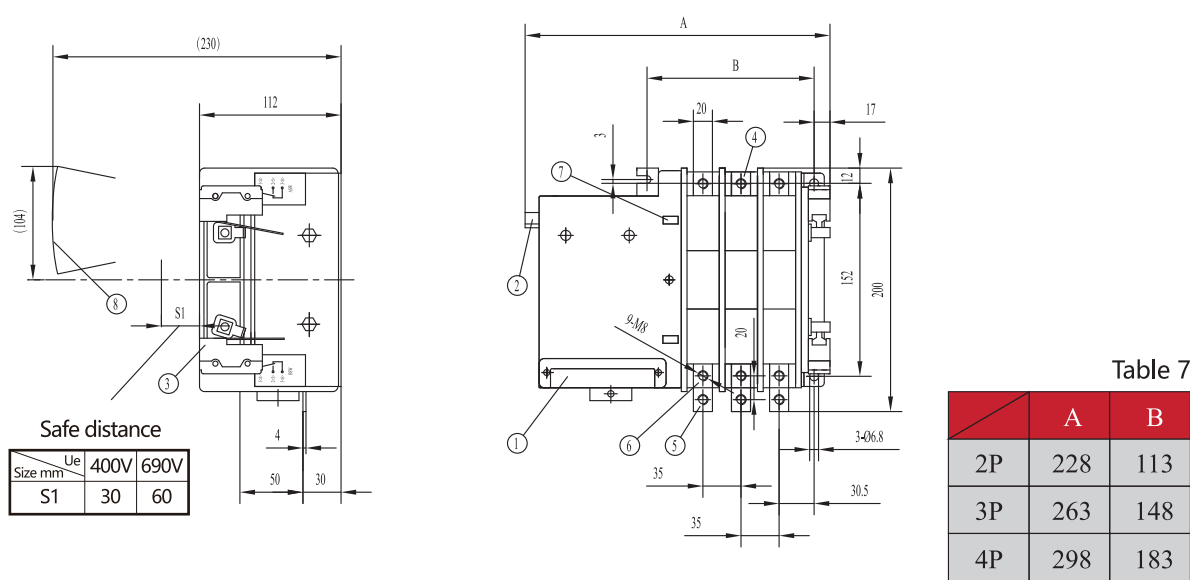
2) W-N3 80~125A W-2 80~125A



Note: The drawings A, B size Table 6.

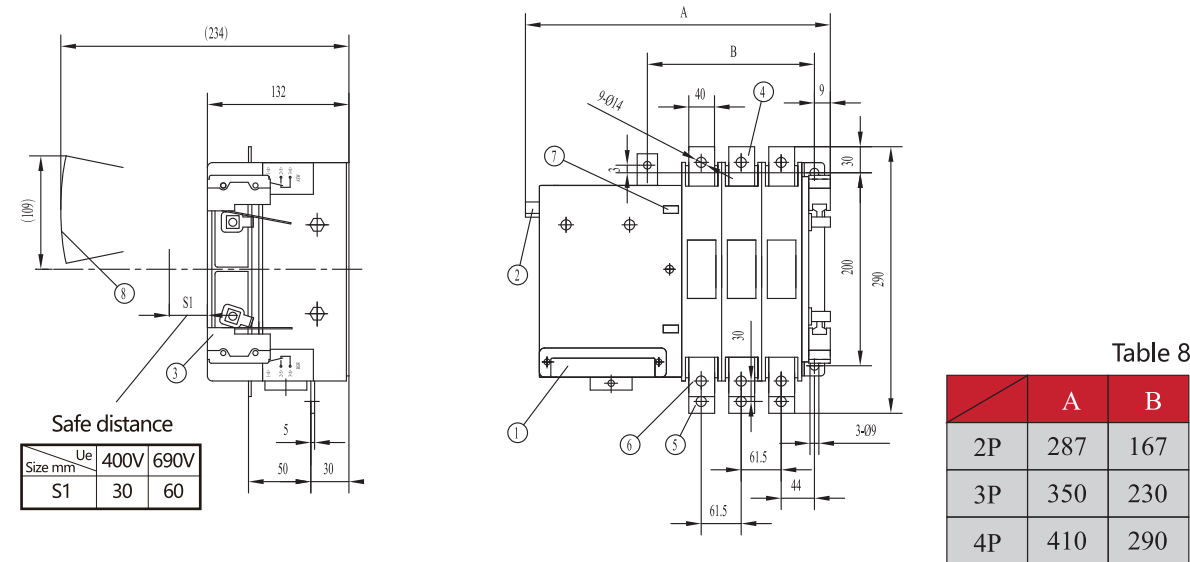
Description:  
The sample size for each installation, dimensions may change, please check with the user to switch the physical size before installation and construction, I am afraid of the Company without notice.

3) W-N3 160~250A W-2 160~250A  
Panel safe distance  
S1 Size : 30mm(400V),60mm(690V)



Note: The drawings A, B size Table 7.

4) W-N3 350~500A W-2 350~500A  
Panel safe distance  
S1 Size : 30mm(400V),60mm(690V)

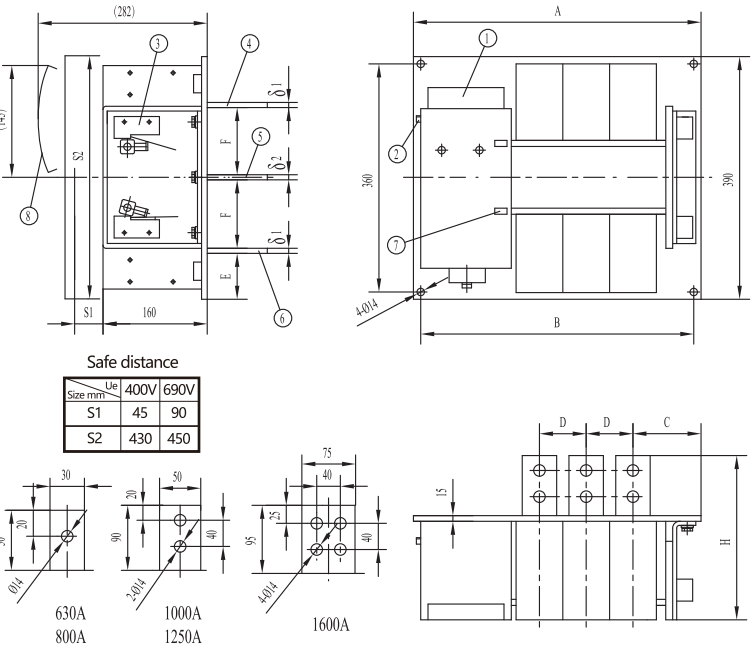


Note: The drawings A, B size Table 8.

- ① The control circuit terminals ② Square shaft manually ③ Auxiliary contacts ④ Common side of the main circuit terminals  
⑤ Load side of the main circuit terminals ⑥ Alternate side of the main circuit terminals ⑦ ON / OFF indicator ⑧ Operating handle rotation range

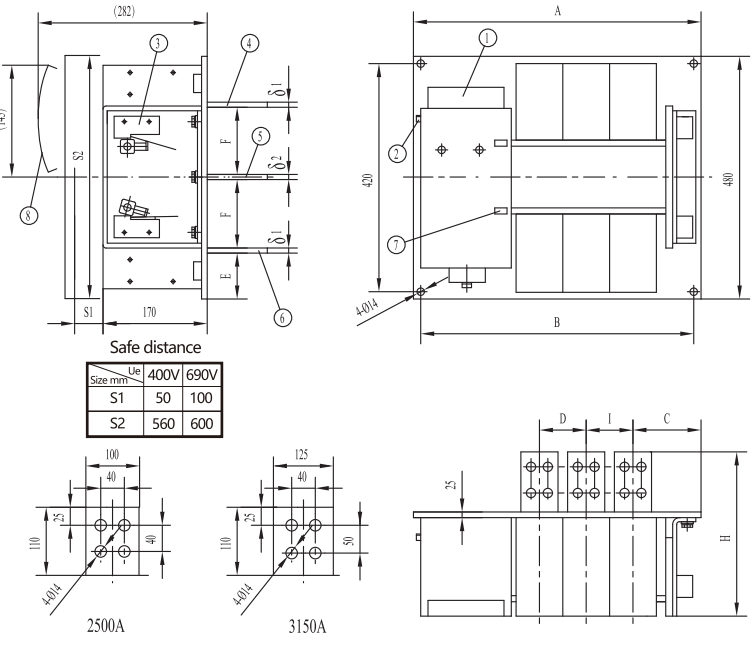


5) W-N3 630~1600A



Note: The drawing A-F, S1, S2 size Table 9.

6) W-N3 1600~3150A (3P)

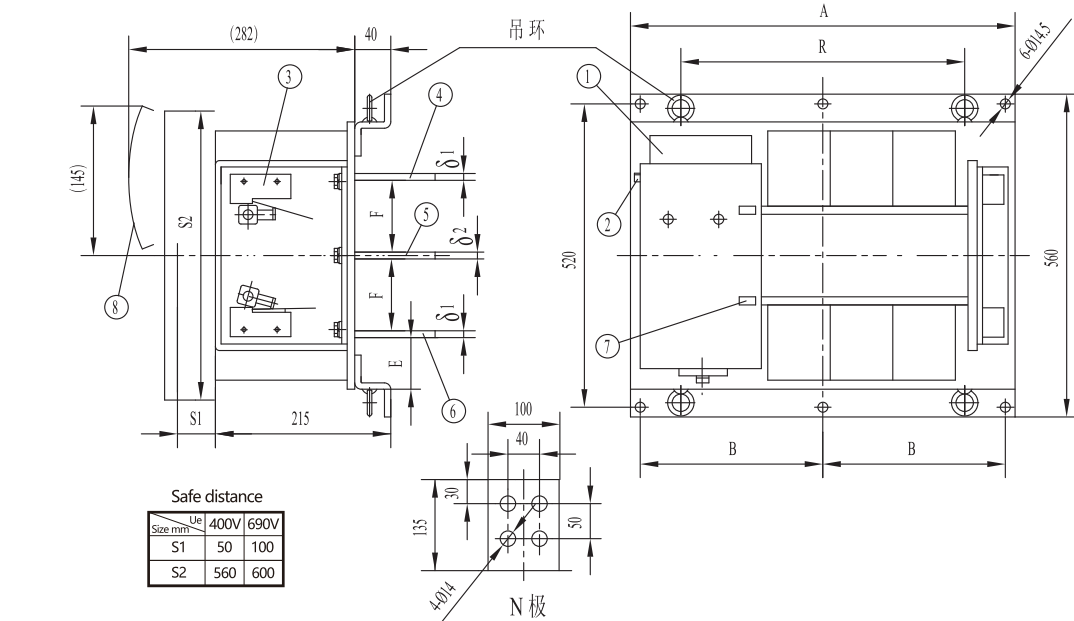


Note: The drawing A-F, H, I, S1, S2 size Table 10.

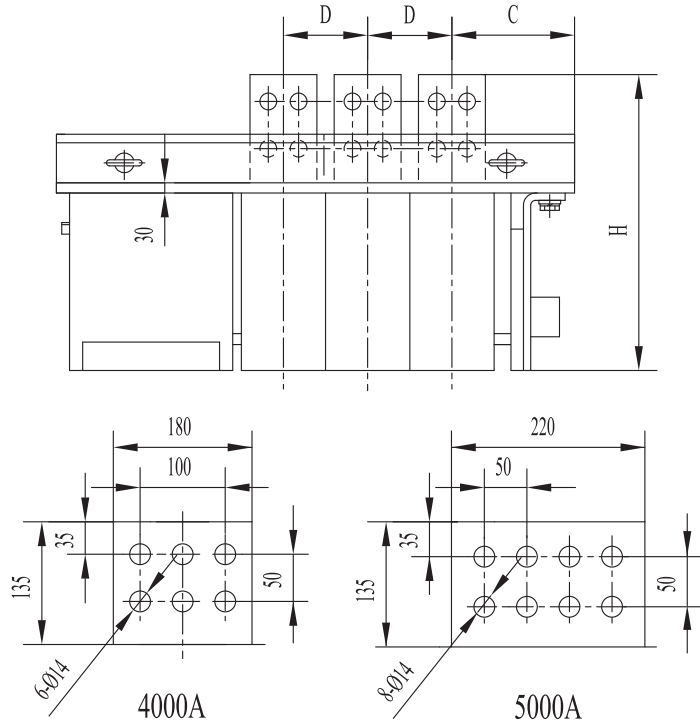
Table 9

Norm		630A 800A	1000A 1250A	1600A
A	2P	340	370	410
	3P	405	450	510
	4P	470	530	610
B	2P	310	340	380
	3P	375	420	480
	4P	440	500	580
C		80	88	97.5
D		65	80	100
E		60	60	57
F		117.5		
δ 1		10/15	12/15	15
δ 2		15		
H		210	250	255

7) W-N3 3150A (4P)~5000A



Former 3150A (4P), 4000A and 5000A automatic transfer switch has been configured four lifting rings, the rings must be checked are tightened on the mounting rail switches before lifting, and check the carrying capacity of the rope should not be less than 500kg, formally lifting also: Notes hanging must try to determine the center of gravity position switch, to prevent gravity grasp allowed to cause rollover, slipping and other major accidents.



Note: The drawing A-F, S1, S2, R, H size Table 11.

Table 11

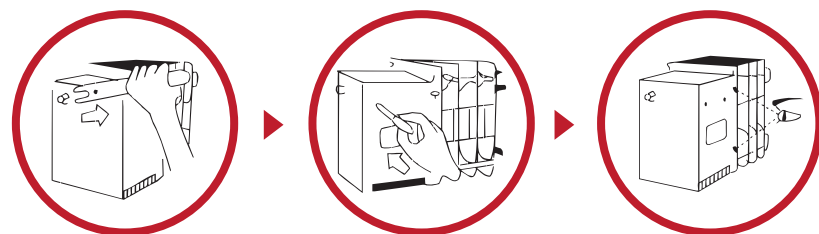
Norm		3150A	4000A	5000A
A	3P		915	1080
	4P	1017	1040	1160
B	3P		430 × 2	500 × 2
	4P	478 × 2	470 × 2	520 × 2
C		135	135	230
D		240	230	270
E		75	75	88
F		114		
δ 1		20		
δ 2		20		
R		800		900
H		335	350	350

## Manually and precautions

The company's W-series switch in the electric operation to ensure its on-off capability, but due to the operation manual of human factors, there are differences in the switching speed can not be guaranteed. Because manual transfer switch load will cause the switching transition when the silver alloy contact damage, it is only in the manual operation of the operating mechanism, contact inspection, maintenance or electrically operated when a fault event.

Note: Before manual operation must cut off all power, manual operating handle end Always remove from the switch.

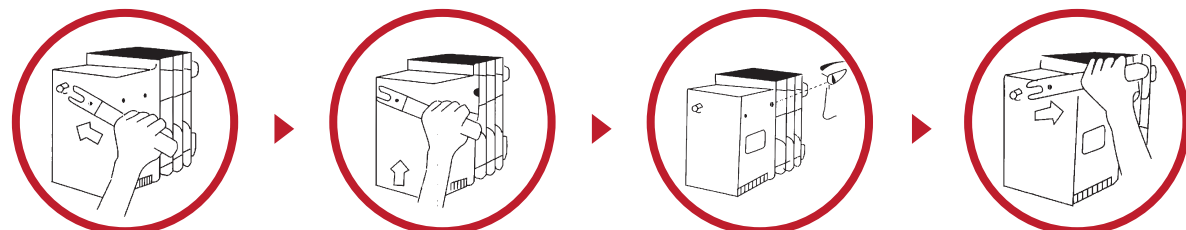
### 1) artificial escape method (only applies to W-N3-type, W-2 type conversion not only trip)



By removing the operating handle state to a screwdriver into the hole and to the left TRIP internal pressure to escape. (Requested by the ON / OFF switch indicator window to confirm whether the trip)

### 2) A supply-side input method

Note: W a need to operate an N3-type) can be carried out after the completion of a 2 and W-type operation is not required. "



Manual operation of the operating handle into the left front end of the operation side of the axis gap.

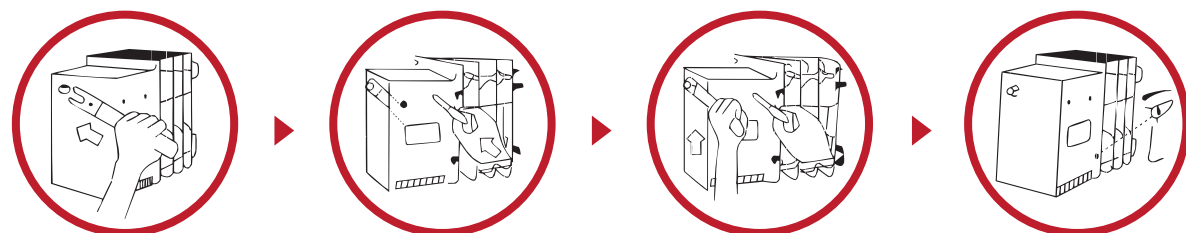
W-N3: pull up the handle, you can invest. W-2: pull the handle down to hear the "click" "click" twice can.

View ON / OFF indicator window to confirm input.

Remove the operating handle after handling.

### 3) B-side power input method

Note: W a need to operate an N3-type) can be carried out after the completion of, and W-2 type need not operate a)



Manual operation of the operating handle into the left front end of the operation side of the axis gap.

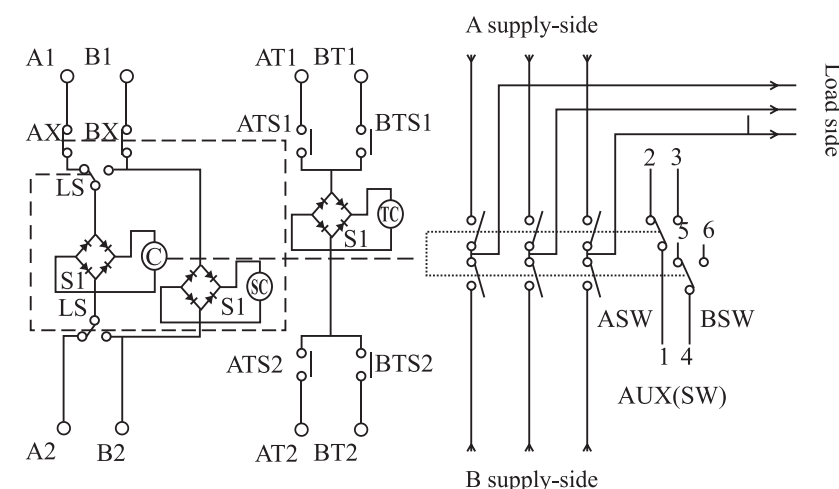
W-N3 SELECT screwdriver into the right hole and to internal pressure. W-2: Just pull down the handle again, and hear a "click" "click" twice can.

W-N3 keep the screwdriver in a position to suppress. At the same time pull up the handle can be put into the B-side

View ON / OFF indicator window to confirm input; remove the operating handle after handling.

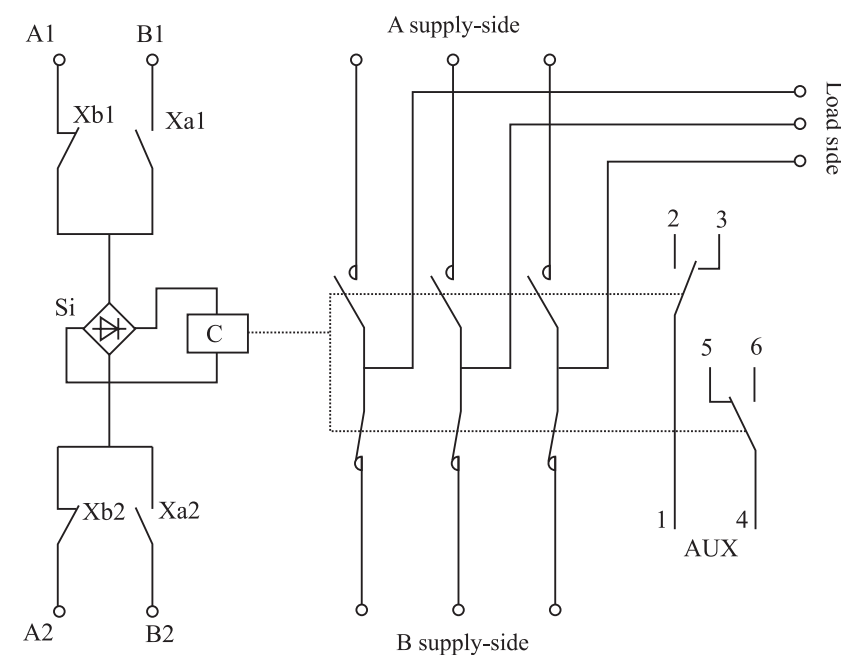
## Switch internal wiring diagram

### 1) W-N3-type internal wiring diagram (two power OFF state)



C = input coil  
SC = Select coil  
TC = trip coil  
S1 = Rectifier  
LS = selector switch  
ATS1, ATS2 = two A power disconnect terminals  
BTS1, BTS2 = B power disconnect terminals  
AX, BX = control switch  
AUX = auxiliary switch  
A1 A2 = A supply side an input terminal  
A two B1 B2 B-side power input terminal  
AT1 a side trip AT2 = A power supply terminal  
BT1 a side trip BT2 = B power supply terminal

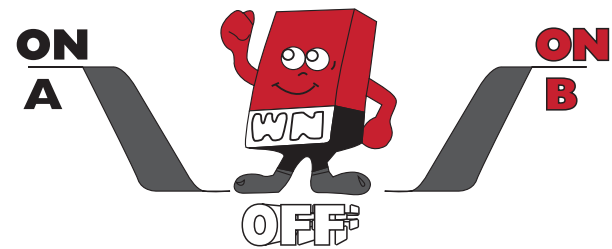
### 2) W-2 (two-stage) Internal wiring diagram



Xb1, Xb2: Internal control switch  
Xa1, Xa2: Internal control switch  
C: input coil  
Si: Rectifier  
AUX: Auxiliary switch  
A1-A2: A supply-side input terminal  
B1-B2: B-side input terminal of the power supply

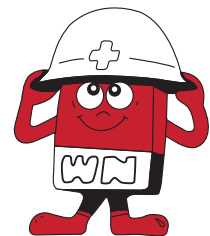
Two separate contacts

There tripping device, there is absolutely neutral (OFF) position.  
Therefore, the order of operations is as follows:  
A → OFF → A and B → OFF → B or  
A → OFF → B and B → OFF → A



Security Design

Dust-proof Resin guard, safe operation

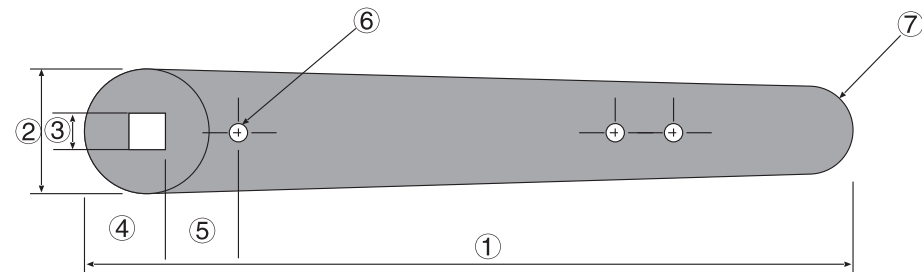


Interruption characteristic

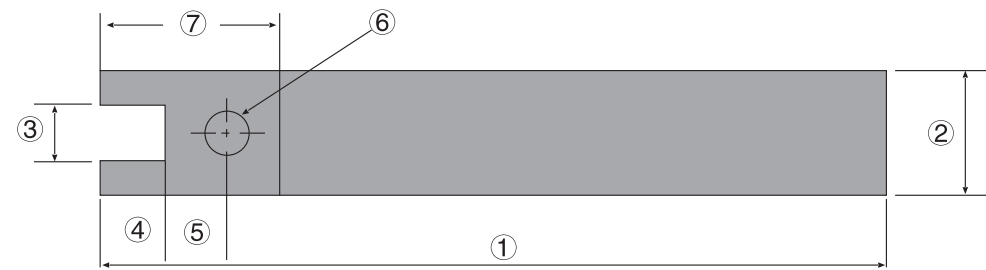
Depending on the operating voltage to produce a constant force spring

Operating handle

See the application and selection



	①	②	③	④	⑤	⑥	⑦	t
63A~500A	210	34	10	22	20	Φ5(3)	Φ24	6(7)



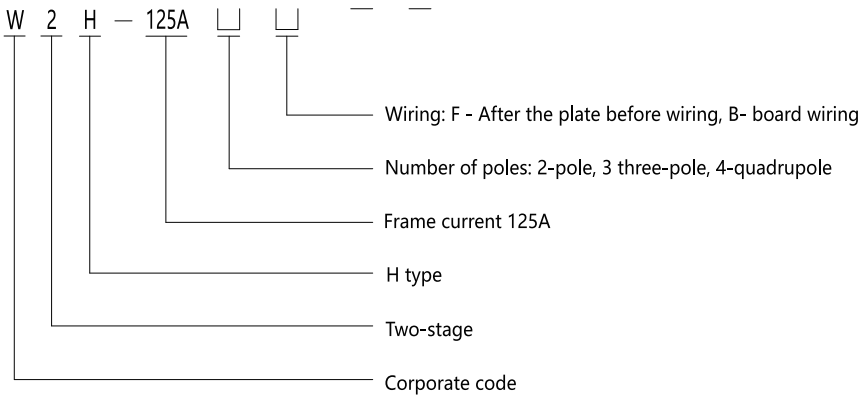
	①	②	③	④	⑤	⑥	⑦	t
600A~1600A	250	38(40)	16.1	20	15	Φ8	41	6(8)
2000A 3000A	320	50(52)	19.1	25	15	Φ8	50	9(11)
4000A 5000A	420	50(52)	19.1	25	15	Φ8	50	9(11)

W2H Series DUAL POWER AUTOMATIC TRANSFER SWITCH ATSE



W2H series dual power automatic transfer switch for AC 50Hz or 60Hz, rated working voltage up to 400V, rated current up to 250A of the emergency power supply system in W2H. Series automatic transfer switches from the switch body (TSE) and WST-5 (WST-6) controller. TSE compact body structure, conversion, reliable, long life, easy installation and maintenance, can also be manually electric, widely used in various occasions unsustainable power. And controller combination TSE body becomes an automatic transfer switch (ATSE) common power supply phase loss, overvoltage and undervoltage, according to the set delay time automatically load from the normal source for access to standby power, the controller further You can set automatic recovery or from a vote of no self-recovery program two operations.

Product code and meaning



## Basic parameters

Model	W2H-125A					W2H-250A				
Rated operating current Ie	16	20	25	32	40	140 160 200 225 250				
A	50	63	80	100	125					
Rated insulation voltage Ui	AC 690V , 50Hz									
Rated operating voltage Ue	AC 400V , 50Hz									
level	PC level: the ability to access and load, but not for breaking short-circuit current.									
Use category	AC33iA Typical use: The total system load containing cage-type motors and resistive loads.									
Poles	2P	3P		4P		2P	3P		4P	
Weight (kg)	1.5	1.75		2.0		1.6	2.4		3.2	
Rated making and breaking capacity	6.0Ie , 1.05Ue , cosφ=0.50±0.05 , 50次									
Operating performance	2.0Ie , 1.05Ue , cosφ=0.80±0.05 , 6000次									
Rated limit short-circuit current Iq	100kA									
SCPD (fuse)	RT16-00-125A					RT16-1/250A				
Rated impulse withstand voltage	8kV									
Control circuit	Rated control supply voltage Us: AC220V, 50Hz. Proper working conditions: 85% Us ~ 110% Us									
Auxiliary circuit	Two separate trip switch, each trip switch contains two sets of changeover contacts. Contact capacity: AC220V 50Hz, Ie = 16A									
Contact conversion time	< 1s									
Conversion action time	< 1s									
Return to action time	< 1s									
Disconnect the power time	< 100ms									

## Dimensions and installation dimensions

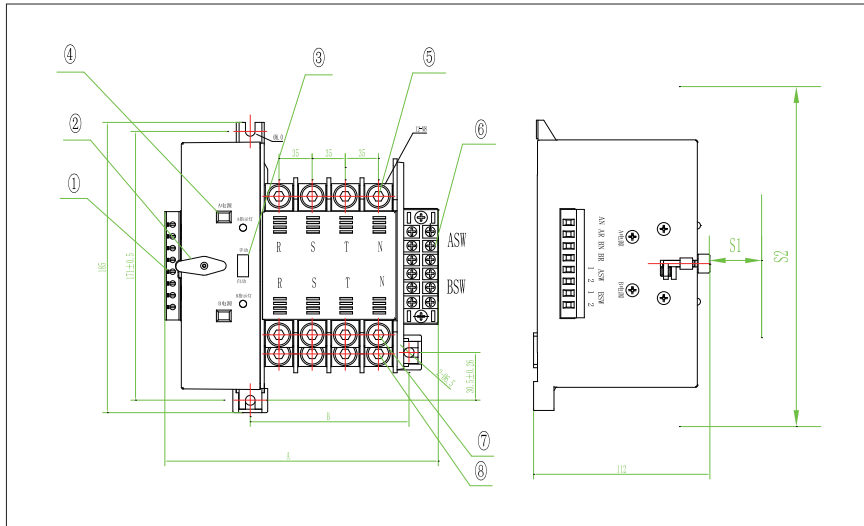


Table 2 W2H-125A relevant dimensions

Poles	Size	A	B
2P		133	59
3P		154	80
4P		175	101

Safety distance S1:  $\geq 30\text{mm}$   
S2:  $\geq 240\text{mm}$

figure 1 W2H-125A Dimensions and installation dimensions

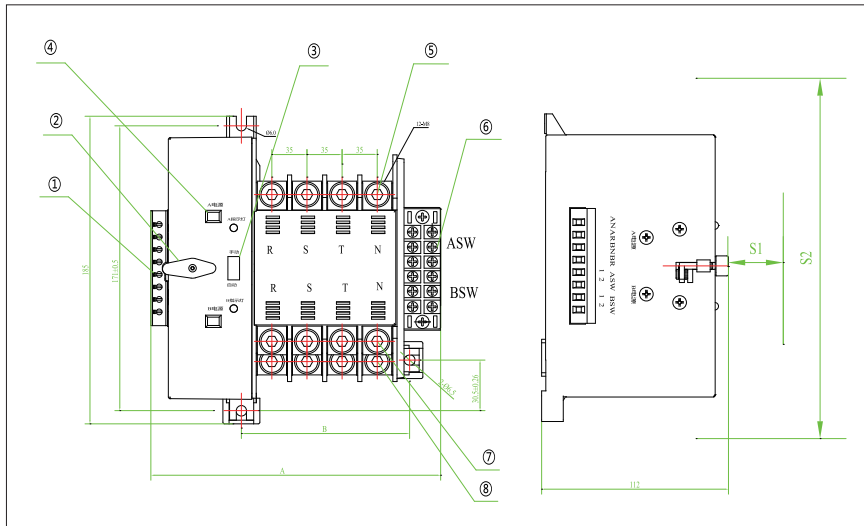


Table 3 W2H-250A relevant dimensions

Poles	Size	A	B
3P		196	121
4P		231	156

Safety distance S1:  $\geq 30\text{mm}$   
S2:  $\geq 290\text{mm}$

figure 2 W2H-250A Dimensions and installation dimensions

- ① control circuit terminals A1, A2, B1, B2 (220V) ② manual handle ③ selector switch (manual / automatic)  
④ ON / OFF indication ⑤ common power off the main circuit terminals ⑥ auxiliary contacts (ASW, BSW)  
⑦ standby power main circuit terminals ⑧ load side of the main circuit terminals

■ W2H internal wiring diagram

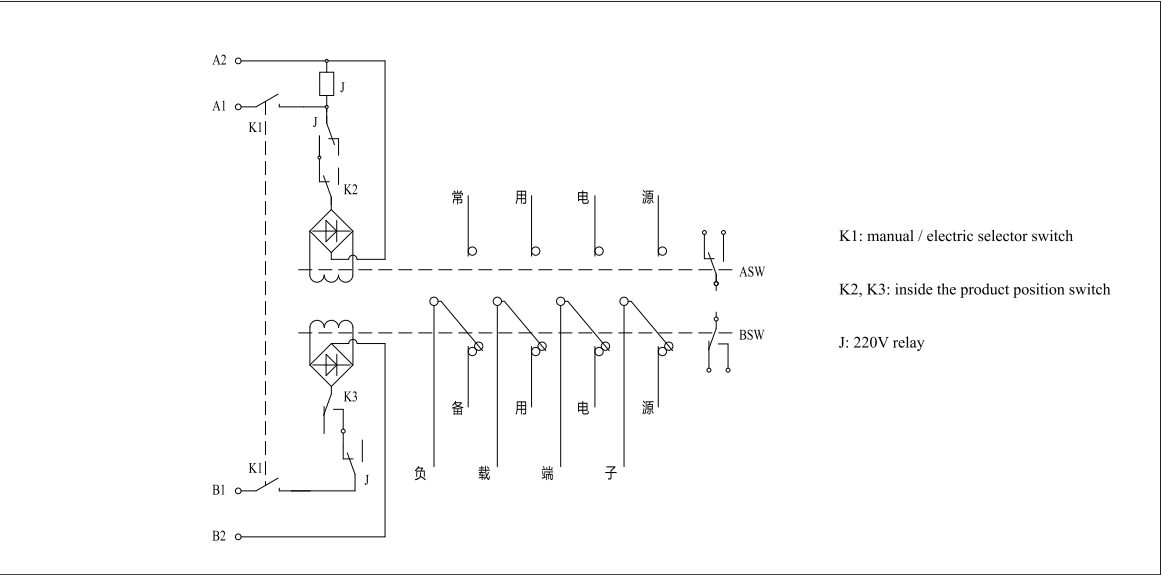


Figure 3 Internal wiring diagram

■ W2H unworthy controller wiring diagram

W2H unworthy controllers, switches can automatically switch and automatic recovery functions.

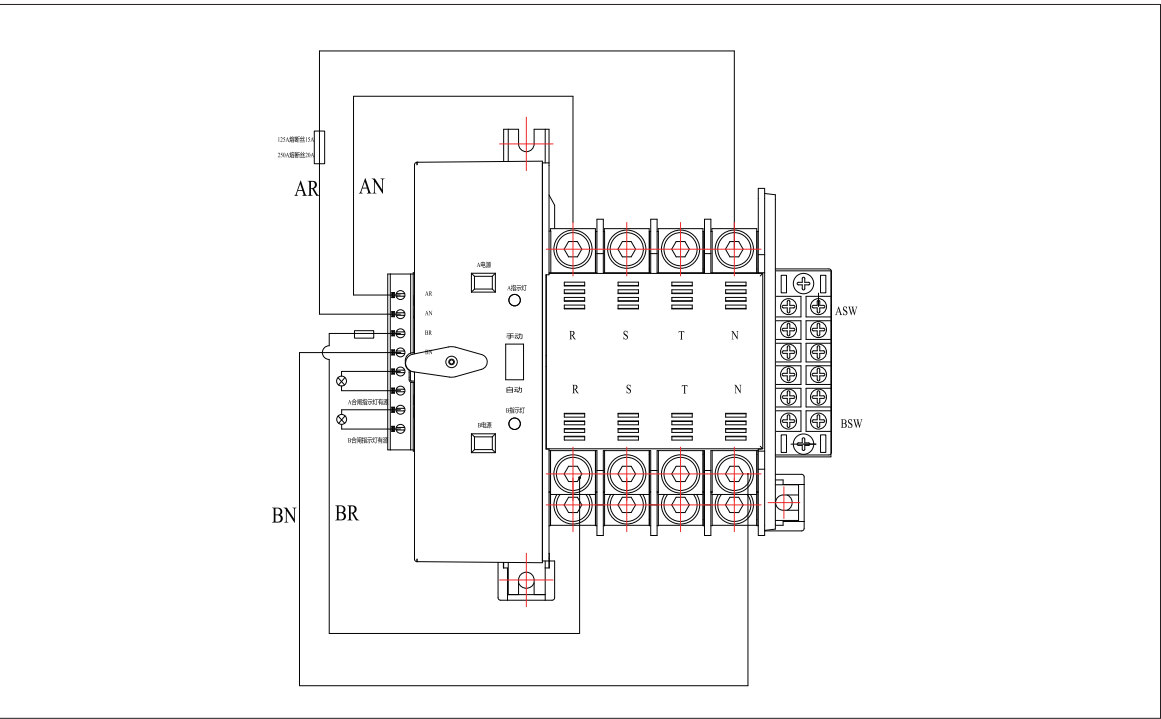
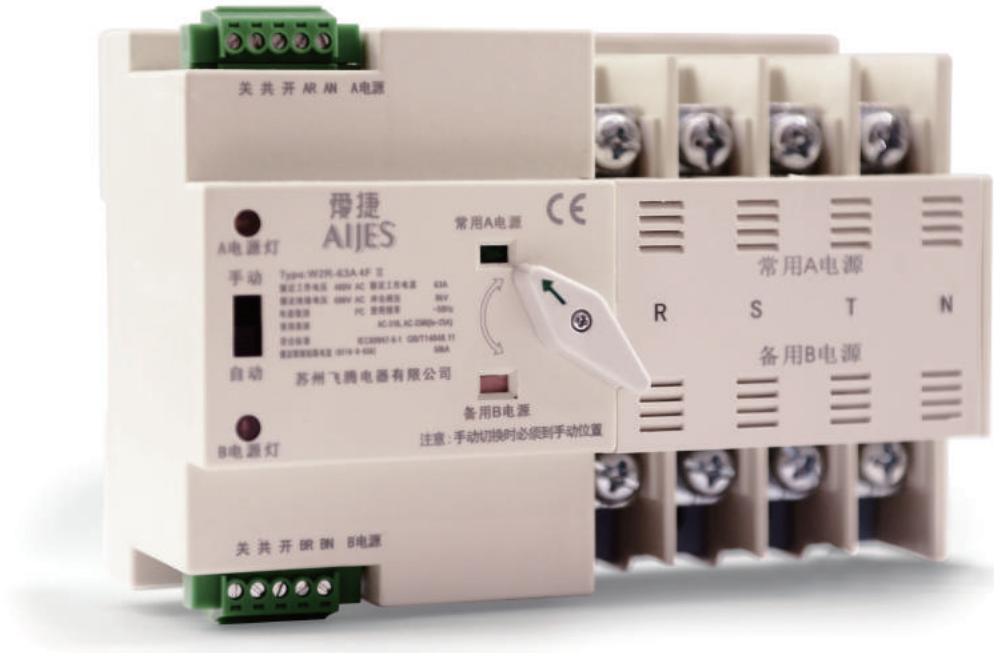


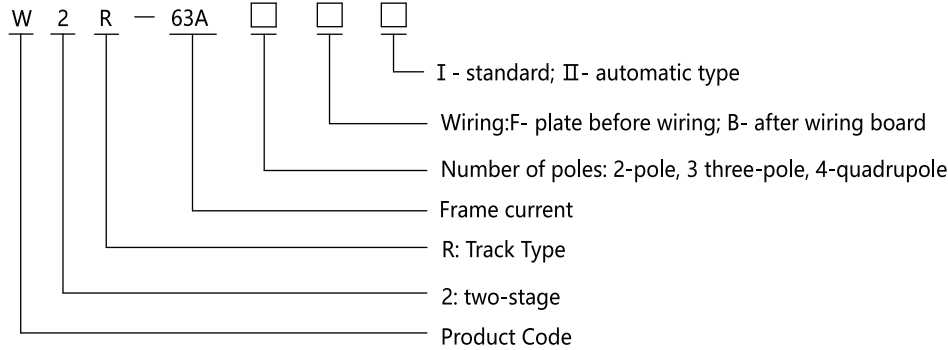
Figure 4 deserve controller wiring diagram

# W2R Series DUAL POWER AUTOMATIC TRANSFER SWITCH ATSE



W2R series dual power automatic transfer switch for AC 50Hz or 60Hz, rated working voltage up to 63A of emergency power supply system. TSE compact body structure, conversion, reliable, long life, easy installation and maintenance, can also be manually electric, widely used in various occasions unsustainable power. TSE and controller combination body becomes an automatic transfer switch (ATSE). ATSE line with GB / T14048.11 voltage switchgear and control equipment, Part 6-1: Multiple function equipment - Transfer switching equipment.

■ Model and Classification





■ Basic parameters

Model	W2R-63A		
Rated operating current Ie A	16 20 25 32 40 50 63		
Rated insulation voltage Ui	AC 690V , 50Hz		
Rated operating voltage Ue	AC 400V , 50Hz		
level	PC level: the ability to access and load, but not for breaking short-circuit current.		
Use category	AC-31B, AC-33iB		
Poles	2P	3P	4P
Weight (kg)	1.7	2.1	2.6
Rated making and breaking capacity	6.0Ie , 1.05Ue , $\cos\varphi=0.50\pm0.05$ , 50次		
Operating performance	2.0Ie , 1.05Ue , $\cos\varphi=0.80\pm0.05$ , 6000次		
Rated limit short-circuit current Iq	50kA		
SCPD (fuse)	RT16-00-63A		
Rated impulse withstand voltage	8kV		
Control circuit	Rated control supply voltage Us: AC220V, 50Hz. Proper working conditions: 85% Us ~ 110% Us		
Auxiliary circuit	Two separate relays, each group contains 2 passive changeover contacts. Contact capacity: AC220V 50Hz, Ie = 5A		
Contact conversion time	< 1s		
Conversion action time	< 1s		
Return to action time	< 1s		
Disconnect the power time	< 1s		

■ Dimensions and installation dimensions

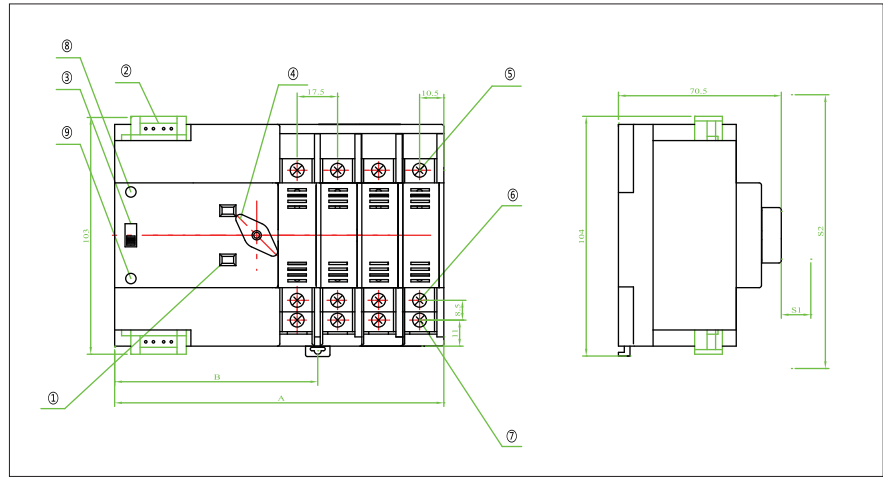


Table 2 W2R-63A relevant dimensions

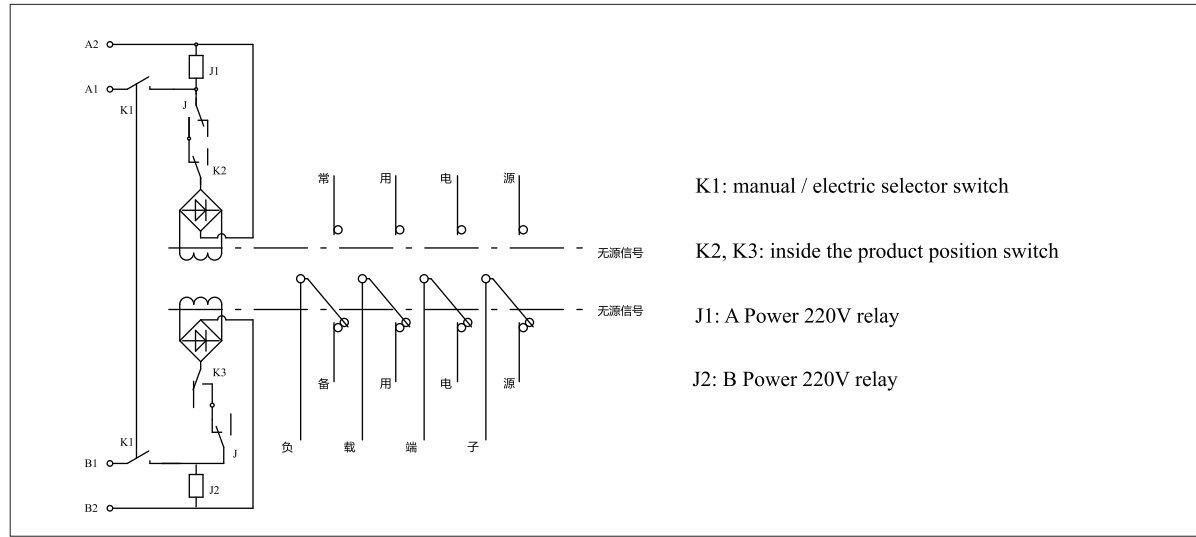
Size Poles	A	B
2P	107.5	72
3P	125	78
4P	142.5	88

Safety distance S1:≥30mm

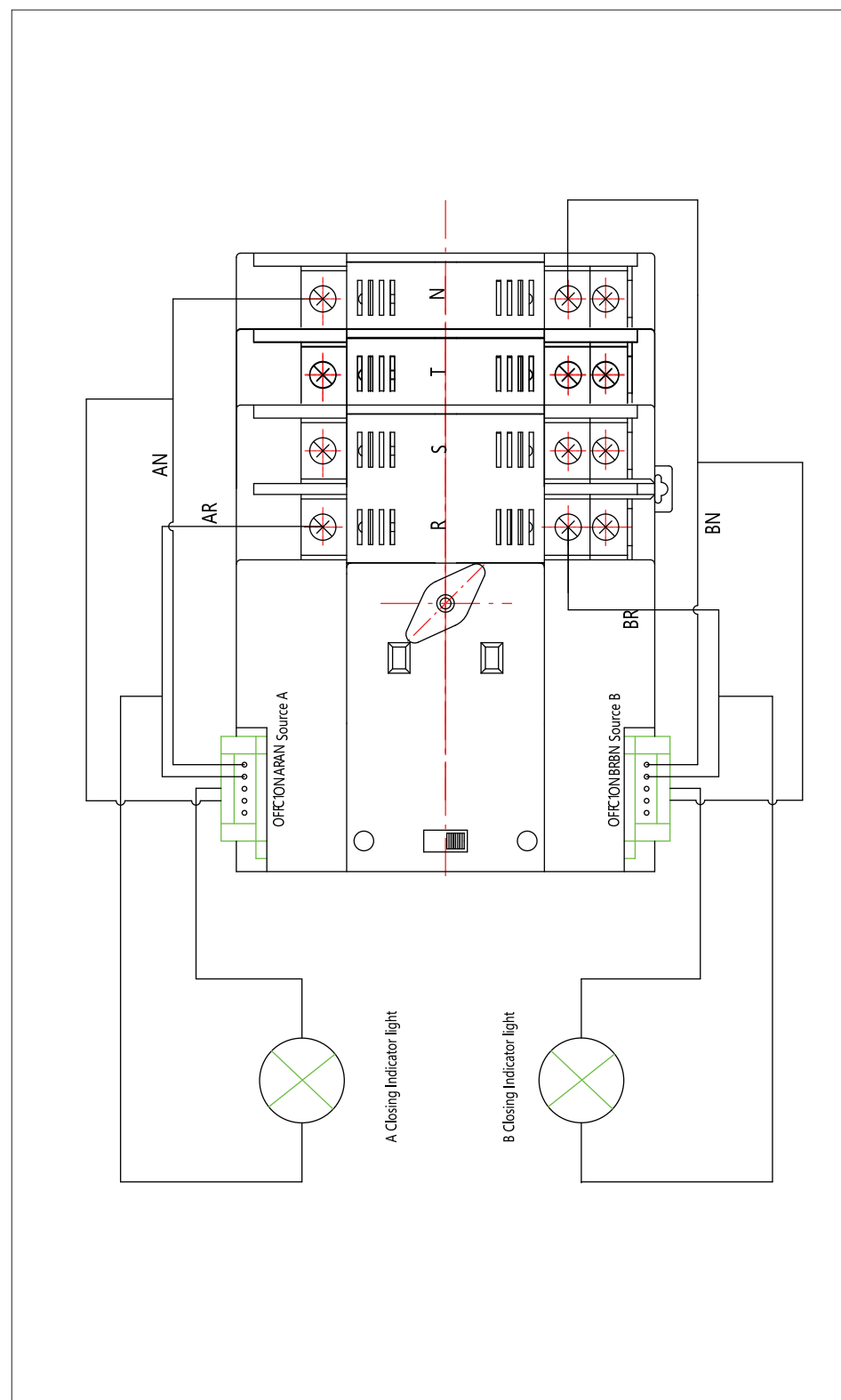
S2:≥203mm

- ① ON / OFF control of the power-off instruction ② ④ selector switch (manual / automatic) ④ manual knob  
⑤ common main circuit terminals ⑥ standby power main circuit terminals ⑦ load side of the main circuit terminals  
⑧ A power indicator ⑨ B Power indicator

■ W2R internal wiring diagram



## ■ W2R control Wiring diagram



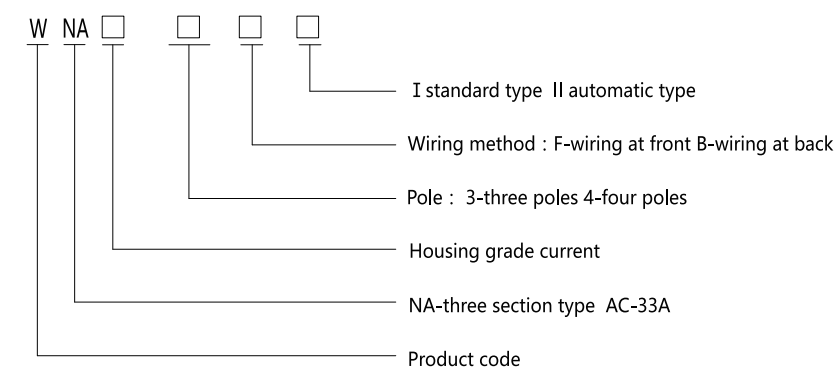
## WNA Series

### DUAL POWER AUTOMATIC TRANSFER SWITCH



In order to satisfy AC-33A use category, WNA series dual-power automatic transfer switches adopt such designs as the structure of three contacts, separate movable and stationary contact(split type), and interlocked contact(to limit position) and so on. Each pole has independent making and breaking indication. Incoming and outgoing line are exchangeable. WNA series switches are applied to various important occasions of high reliability and security such as data centers, power plants, airports, hospitals, communications and petroleum sites. Used with the WST-5 and WST-6 controller, it is capable of multi-functional conditional transfer. Products of superimposed connected center line transfer function are its derivatives.

## ■ Product model and category



■ Basic parameters

Model	WNA 63A	WNA 125A	WNA 250A	WNA 400A	WNA 630A	WNA 5000A
Rated operating current Ie A	16 20 25 32	80 100 125	140 160 200 225 250	350 400	500 630	800 1000 1250
	40 50 63					1600 2000 2500
						3200 4000 5000
Rated insulation voltage Ui	AC 800V, 50Hz					
Rated operating voltage Ue	AC 400V,50Hz					
	AC 690V,50Hz					
Grade	PC grade: able to make and withstand, not to break short-circuit current					
Use category	AC-33A (AC 400V) 、 AC-33iA (AC 690V)					
Pole	4P					
Rated making and breaking capacities	10Ie,1.05Ue,50times					
Operating performance	2.0Ie,1.05Ue,6000times					
Rated conditional short-circuit current Iq	120kA					
Rated impulse withstand voltage	8kV					
Control circuit	rated control source voltage Us : AC220V, 50Hz, correct working condition : 85%Ue~110%Ue					
Auxiliary circuit	Source A and B are both 2 normally open ; switch capacity AC : 110V5A/AC:220V3A DC:200V0.2A					
Contact transfer time	<50ms					
Operating transfer time	<100ms					
Return transfer time	<100ms					
Power off time	<50ms					

■ Switch Dimension

Current ( A )	Pole	Length ( mm )	Width ( mm )	Depth ( mm )
16-63	2P	202	190	132
	3P	224	190	132
	4P	246	190	132
80 ,100, 125	2P	218	194	132
	3P	248	194	132
	4P	278	194	132
140-250	2P	228	194	132
	3P	263	194	132
	4P	298	194	132

Current ( A )	Pole	Length ( mm )	Width ( mm )	Depth ( mm )
350 ,400	2P	287	290	147
	3P	349	290	147
	4P	410	290	147
500 ,630	3P	405	390	210
	4P	470	390	210
800- 5000	3P	800	480	305
	4P	970	480	305

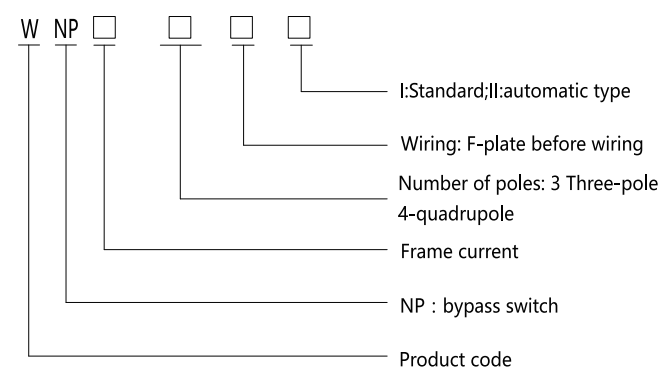
# WNB Series

## DUAL POWER AUTOMATIC TRANSFER SWITCH



WNB is withdrawable switch power supply side with bypass can be made in the mains power supply status, the bypass switch is closed, power is maintained by the bypass switch. Withdrawable by mechanical means, the body is moved to the test position, or pulled out of the main body frame switch, repair or replace the main switch until after the completion of inspection, then put it back again within the framework of the body ,by the main power switch on, bypass switch off, and uninterruptible power production process to achieve maintenance, to ensure continuity of supply.

### ■ Product model and category



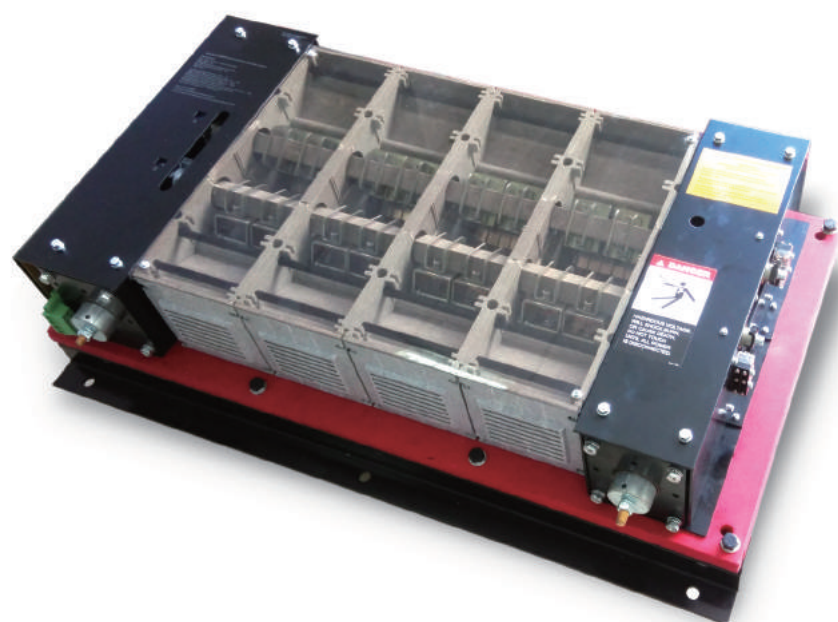
1. Dedicated PC Level: Professional integrated structure, electromagnetically driven, independent arc system.
2. Drawer structure: withdrawable design, maintenance, replacement convenient.
3. Bypass structure: In this in vitro increase in bypass switch, when the body needs to maintain, to get the correspond bypass switch on and then put out of the switch body so as not to affect the normal operation of the lower end of the load
4. Electromechanical Interlock: mechanical, electrical multiple interlock, rigorous logic to ensure the safe and reliable operation to prevent malfunction.
5. Isolation protection: bypass product frame equipped with an insulating spacer, the spacer automatically fall down after the body pull out, will live part isolation from the outside world to ensure that on-site personnel to operate safely.
6. Position signal: body, a bypass position signal indicate and sub-closing switch signal, accurately display system status.

## ■ Basic parameters

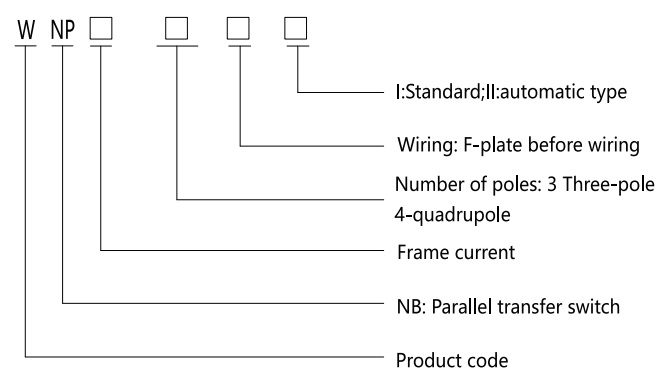
Model	WNB 250A	WNB 630A	WNB 2500A	WNB 4200A
Rated operating current Ie A	16 20 25 32 40 50 63 80 100 125 140 160 200 225 250	350 400 500 630	800 1000 1250 1600 2000 2500	3200 4000 4200
Rated insulation voltage Ui	AC 800V, 50Hz			
Ue	AC 400V,50Hz			
Rated operating voltage Ue	AC 690V,50Hz			
Level	PC level: the ability to access and load, but not for breaking short-circuit curr			
Use category	AC-33A (AC 400V) 、 AC-33iA (AC 690V)			
Polest	4P			
Rated making and breaking capacity	6.0Ie , 1.05Ue , cosφ=0.50±0.05 , 50 times			
Operating performance	2.0Ie , 1.05Ue , cosφ=0.80±0.05 , 6000 times			
Rated limit short -circuit current Iq	200kA			
Rated impulse withstand voltage	8kV			
Control circuit	Rated control supply voltage Us: AC220V,50Hz.Proper working conditions: 85%Us ~ 110%Us			
Auxiliary circuit	Two limit switches, each group contains 2 changeover contacts. Contact capacity: AC220V 50Hz ,			
Contact conversion time	<50ms			
Conversion action time	<100ms			
Return to action time	<100ms			
Disconnect the power time	<50ms			

## ■ Dimension

Model	4PLength (mm)	Width (mm)	Depth (mm)
WNB 250A	790	350	550
WNB 630A	890	550	550
WNB 2500A	950	810	600
WNB 4000A	1250	870	940



## ■ Product model and category



- ## ■ Basic parameters

Model	WNCT 250A	WNCT 630A	WNCT 2500A	WNCT 4200A
Rated operating current Ie A	16 20 25 32 40 50 63 80 100 125 140 160 200 225 250	350 400 500 630	800 1000 1250 1600 2000 2500	3200
Rated insulation voltage Ui	AC 800V, 50Hz			
Ue Rated operating voltage Ue	AC 400V,50Hz			
Level	PC level: the ability to access and load, but not for breaking short-circuit curr			
Use category	AC-33A			
Polest	4P			
Rated making and breaking capacity	6.0Ie , 1.05Ue , cosφ=0.50±0.05 , 50 times			
Operating performance	2.0Ie , 1.05Ue , cosφ=0.80±0.05 , 6000 times			
Rated limit short -circuit current Iq	200kA			
Rated impulse withstand voltage	8kV			
Control circuit	Rated control supply voltage Us: AC220V,50Hz.Proper working conditions: 85%Us ~ 110%Us			
Auxiliary circuit	Two limit switches, each group contains 2 changeover contacts. Contact capacity: AC220V 50Hz , I			
Contact conversion time	<80ms			
Conversion action time	<200ms			
Return to action time	<200ms			
Disconnect the power time	<80ms			

## ■ Dimension

Model	4PLength (mm)	Width (mm)	Depth (mm)
WNCT 250A	380	197	150
WNCT 630A	530	330	170
WNCT 2500A	755	585	290
WNCT 4000A	950	585	290

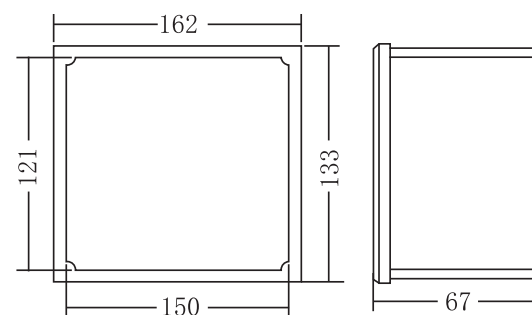


# WST-5 Series Controller



WST-5 controller is our original WST-3 controller upgrade, powerful, high performance for a variety of dual power switch electrical appliances. It has programmable functions, automatic measurement, precision instruments LCD display with digital communications as one of the intelligent dual power switching module. It combines digital, intelligent, network-based on a measurement and control process automation, reduce human error, is ideal for dual power switching control products.

## Controller Installation Dimensions

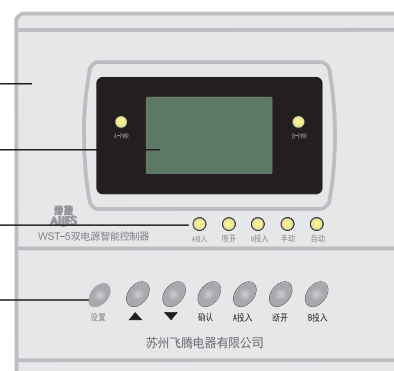


Controller main part

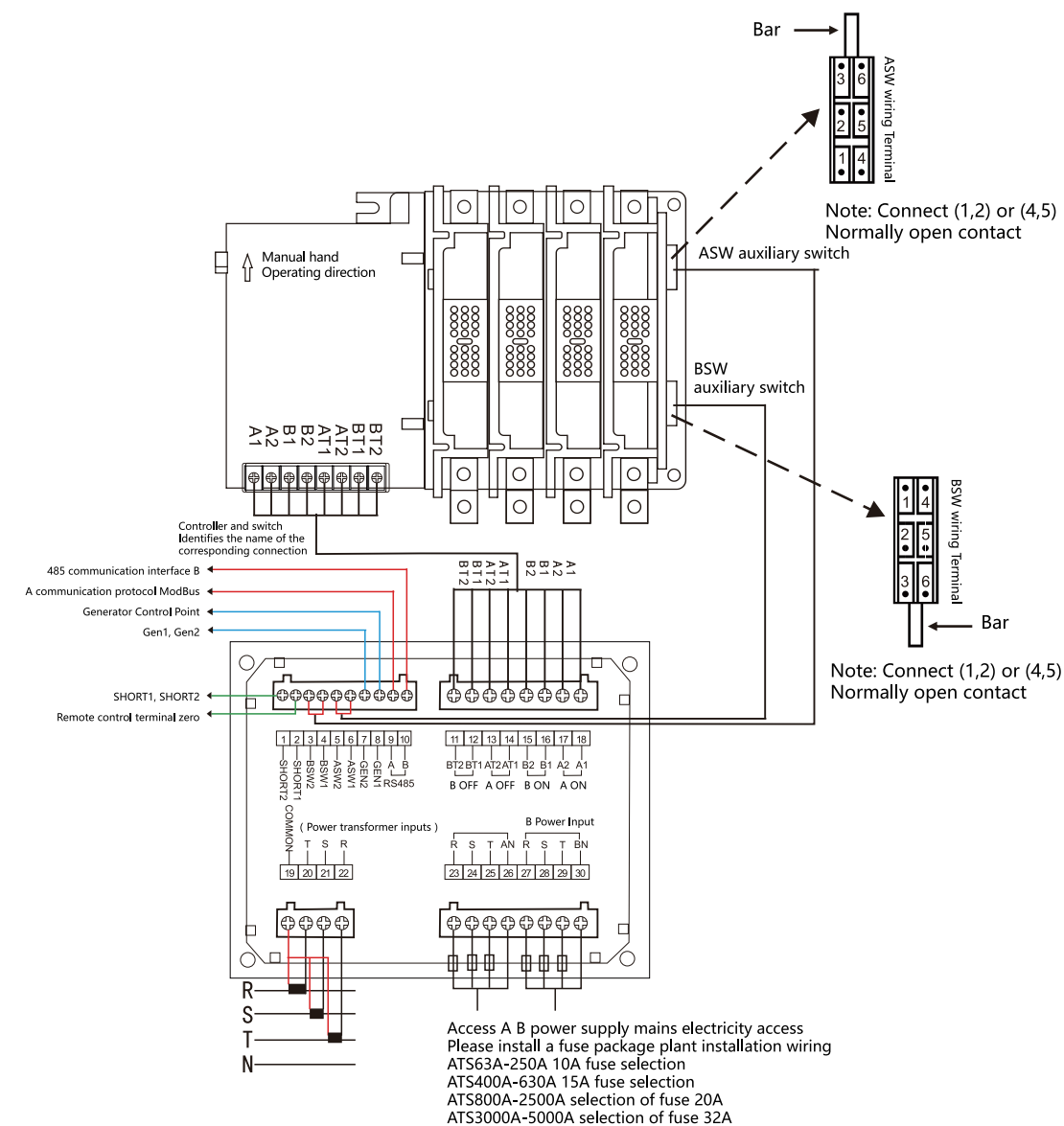
LED function LCD digital display screen

Status Indicator

Function keys



## WST-5 THREE-STAGE SWITCH CONTROLLER AND WIRING DIAGRAMS



### FUNCTION:

All specifications apply

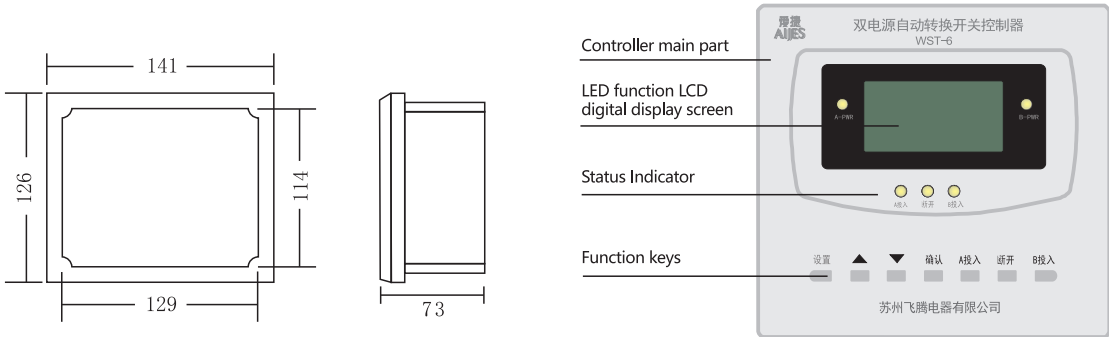
- 1.Delay function
- 2.status indicator for power
- 3.overvoltage protection function
4. Remote reset function
- 5.undervoltage protection function
- 6.Generator start function
- 7.open phase protection function
- 8.485 communication interface
- 9.Voltage display function
- 10.overcurrent protection function
- 11.Power frequency protection
- 12.Load current detection function
- 13.auto ON & reset and spare to each other

# WST-6 Series Controller Simple type

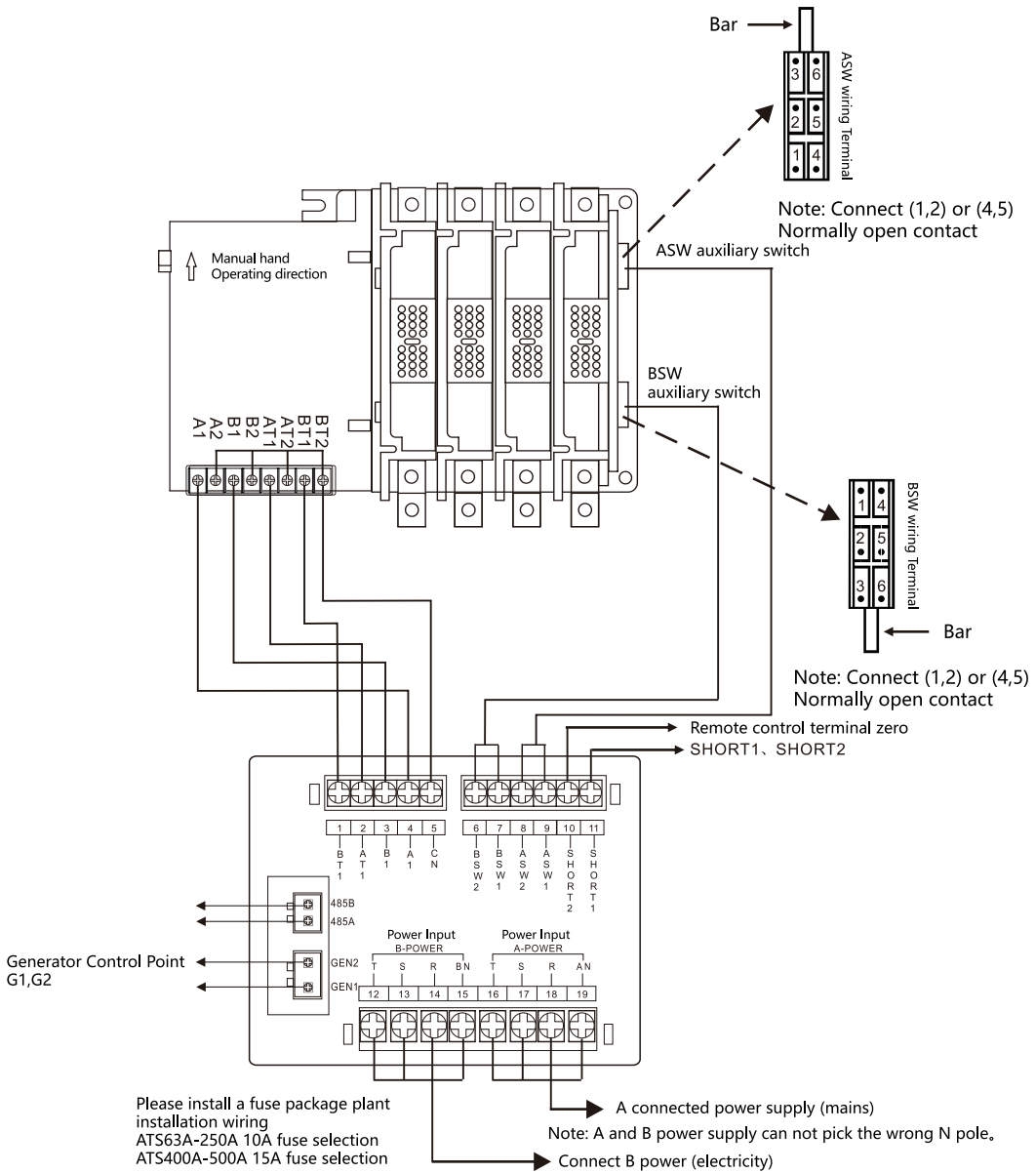


WST-6 controller is my original company WN-2-3-JJ Controller (Simple) upgrade, intelligent control devices Simple and I produced the W-series automatic transfer switch (hereinafter referred to as switch) supporting the use of . Is an increasingly widespread use of innovative power conversion equipment. Issued based on the user setting mode to switch corresponding conversion work status command: is promptly switched from one power switch to the other way power; or start generators: or switch to another power source is not connected with any intermediate position to ensure supply continuity, reliability, security.

## Controller Installation Dimensions



## WST-6 CONTROLLER (SIMPLE TYPE) AND THE THREE-STAGE SWITCH WIRING DIAGRAM



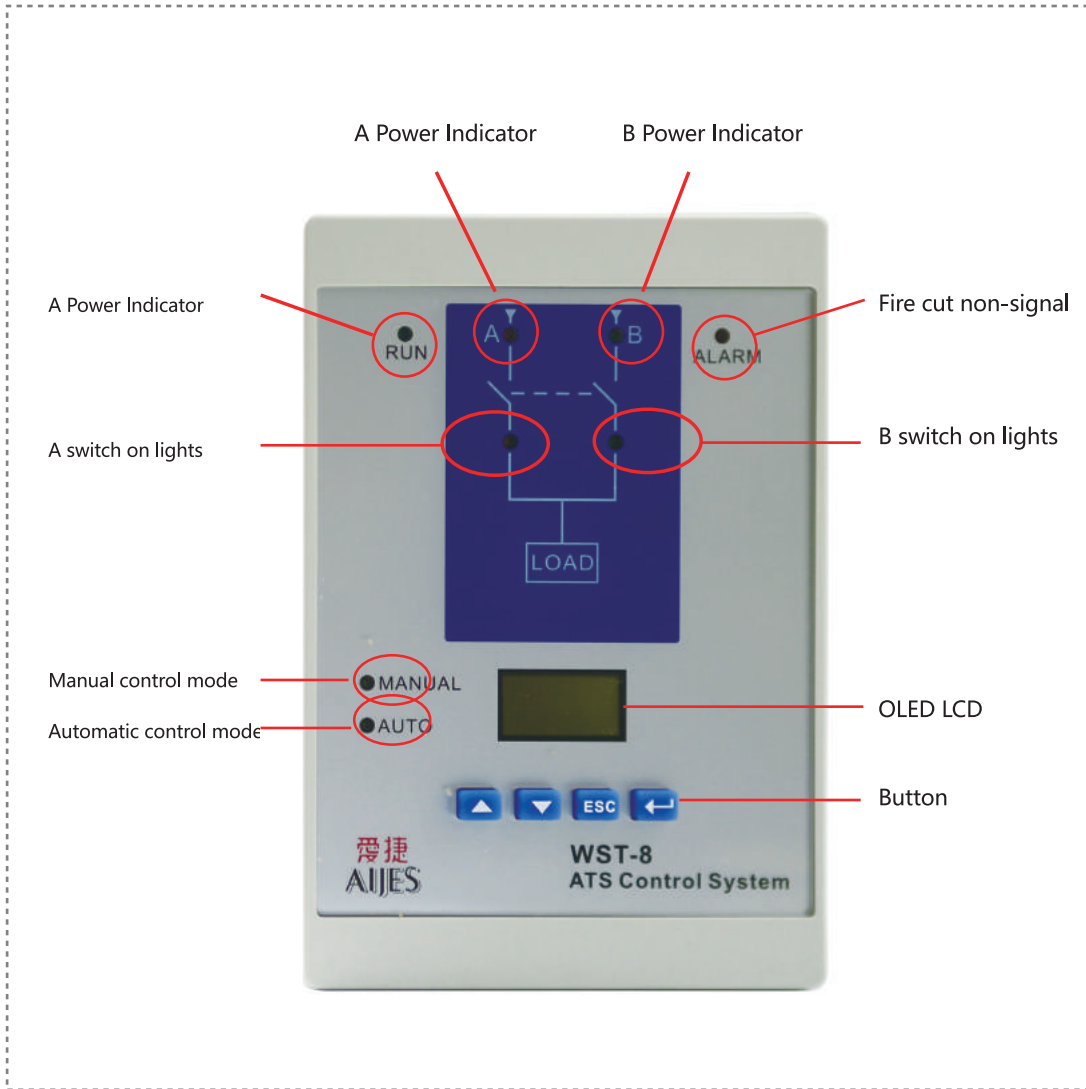
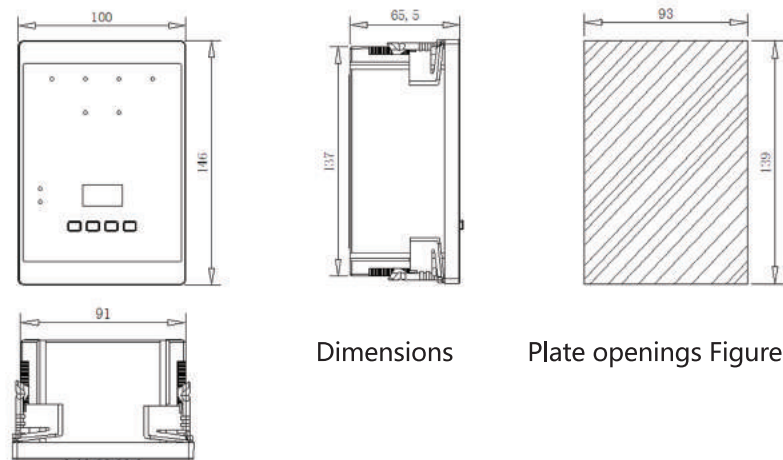
**FUNCTION:**  
Suitable for below 500A  
1.Delay function 2.status indicator for power  
3.Remote reset function 4.Generator start function 5.open phase protection function  
6.485 communication interface function 7. auto ON & reset and spare to each other

# WST-8 Series Controller



WST-8 is a versatile dual power supply controller, which not only has conventional current, voltage, frequency, phase, active, reactive and other electrical parameter measurement, dual power switching functions, while the generator can be used to prepare and cast from the same period detection complex function, to ensure that important load continuous, reliable operation.

## ■ Dimensions and hole diagram



## Features

1, delay function 2. Power indicator 3, 4 overvoltage protection, remote zero function 5, undervoltage protection function 6, 7 function generator start, missing items 8, 485 protection function communication interface 9, voltage display 10, since the complex overcurrent protection 11, power frequency protection function 12, 13 power parameter measurement function, automatic recovery and backup each other 14, the prosecution function 15-year investment and prepare, check synchronization function 16, SOE recording function 17, the device self-test function

# Memorandum