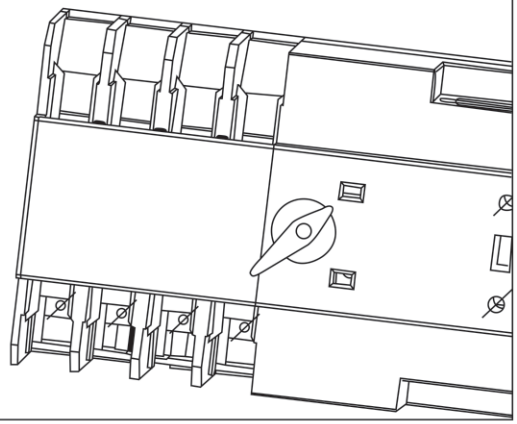
DUAL POWER
Automatic Transfer Switch



1. Product overview

Dual power automatic switch is a newly developed micro household power switch. The switch is mainly used to test whether the main power supply or standby power is normal. When the normal power supply is abnormal, the standby power supply will immediately start to work, to ensure the continuity, reliability and safety of the power supply. This product is specially designed for domestic track installation and is specialy used for PZ30 distribution box.

Dual power automatic switch is suitable for 50 or 60Hz rated 400V AC emergency power supply system. ATS has the characteristics of solid structure, reliable conversion, easy installation and maintenance and long life. It is widely used in a variety of occasions when can not sustain power failure, that is, reliable electrical work, but also manual operation. ATS is made up of TSE and controller.
According to GB/T14048.1 1, makes part6-1:
multi- function equipment and switching equipment, ATS is the most suitable low-voltage switching equipment and control device.

2. Product model and classification

□ - 100A

- 100A: Current lecel
- □: Mini track type
- Enterprise code

3 Basic parameters

For details,please refer to Table 1 for the basic parameters of dual power supplies

Tavle1

Rated current le A	16	25	32	40	50	63	80	100
Insulation voltage	AC 690V,50Hz							
Rated voltage	AC 400V,50Hz							
Level	PC lecel: can be manufactured and withstand without generating short-circuit current							
Use category	AC-33iB					AC-31B		
Rod	2P			3P			4P	
Weight (KG)	0.62			0.71			0.81	
Electrical appliance	Life:2000 times;manual operation 5000 times							
Rated short circuit current	50kA							
Short circuit protection decice (fuse)	RT16-00-63A							
Rated Impulse withstand voltage	8kA							
Control circuit	Rated control voltage Us: AC200V,50Hz Normal working conditions：85%Us~110%Us							
Auxiliary circuit	AC220V 50Hz Ie=5y							
Contactor switching time	<50ms							
Operation tramsition time	<50ms							
return conversion time	<50ms							
power off time	<50ms							

Model: Dual power automatic switching switch

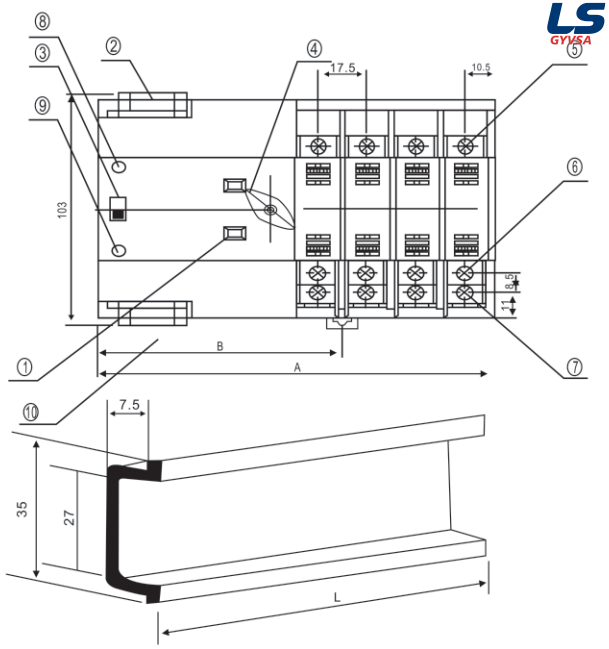
Quantity: 1 PCS

The product has been inspected to meet the technical standards GB/14048 and is approved to leave the factory.

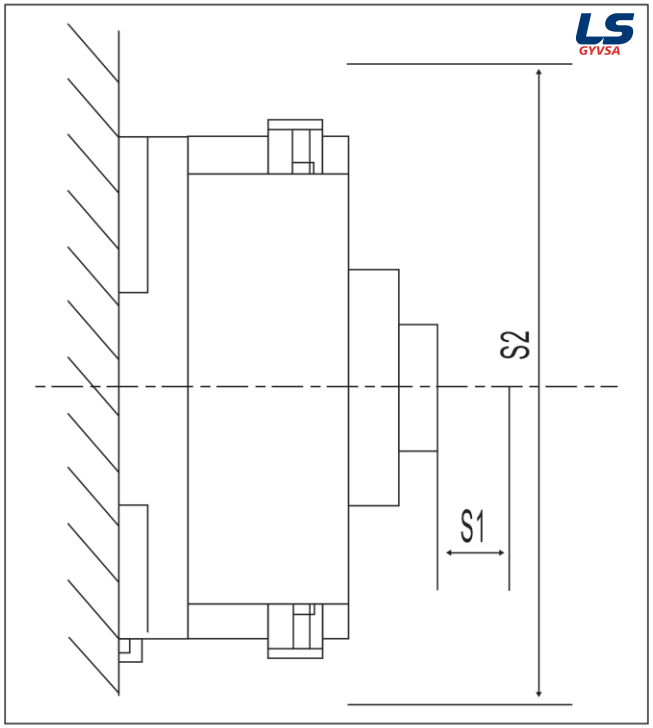
Inspector: check6

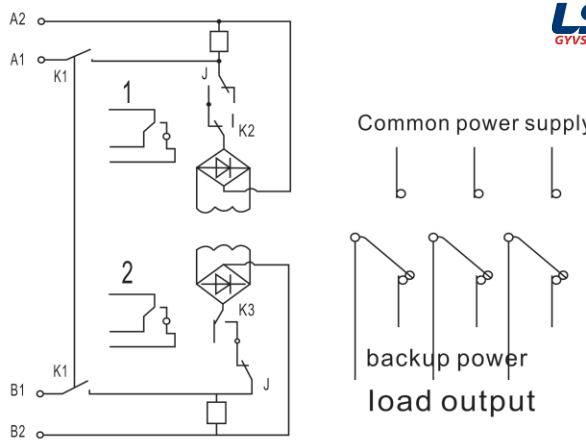
Inspection date:

4.Normal operation time and instalation conditions
4.1 Ambient air temperature
The highest temperature shall not exceed 40C, the lowest shal not be lower than -5C. and the averagc temperature within 24h shall not be higher than 35C.
4.2 Altitude
The clevation of the installation site shall not be higher than 2000m.
4.3 Ammospheric conditions
When the highest temperature reaches 40'C, the relative humidity of the installation sile shall not exceed 50%, when the lowest temperature is -5℃. The relative humidity is high, for example, the temperature is 25℃, while the relative humidity is 90%, Due to temperature changes, special measures should be taken to deal with the occasional condensation on the surface of the product.
4.4 Pollution levels
ATS pollution levcl conforms to the specified Jevel 3 of GB/T14046.11
4.5 Installation calegory
ATS is installed in accordance with the category specified in GB/T14048.1 1
4.6 Instalation conditions
The ATS can be installed vertieally in the control cabinet or distribution cabinet. Make sure the installation distance is as shown in figure 1
5. View dimensions and mounting dimensions
5.1 The appearance and instalation dimensions of ATS are shown in table 2 and figure I.
6.Notes
6.1 Manual/ A utomatic operation
The ATS can guarantee power generation and power oulage performance during circuit opcration, but for manual operation, due to the difference in power generation and power outage spced or operator, the ATS cannot guarantee such performance. Excessive loss of silver alloys may occur during manual power generation and po wer outages. Therefore, when all the power is turned off to check and maintain the operating system and contacts, simply reverse the selection switch to the manual position. In general, the selection switch will be pulled to the autornatic position.
After the manual opcration is completed, pull the selection switch from the manual position to the automatic position.
0.2 control circuit
ATS will active instantly. After conversion, the line diagram in the control cireuit will be disconnected by the internal converter. Under the rated voltage of E80%-1 10%, the coil can operate normally. If the yoltage is too low; the coil will become hot and even spontaneously ignite.
7. Wiring diagram (see figure 2, figure3)
8.Instalfation and wiring
8.1 Ensure that professionals read this manual before instaling and wiring.
8.2 Check the integrity of the ATS before instalHation. Then use the operating handle to open and close APS, check the flexibility of the transtnission device, and detect the generation and disconnection conditions of load in each stage of normal and standby power supply. The correct steps are shown in the diagraml. The trademark is on the front of the productPlcase contact us jf you fail to follow the correct steps due to wiring or other reasons. Thc safc distance S1 and S2 should be no, less than the markings in tigure 1 and figure 2 (Sce the picture below for details) Picture 4 Correct installation instructions.
8.4 Test control voltage: 50Hz, AC220V.
The coil should not be too long in the control circuit. The cutting surface area of copper wire should not be greater than 2.0mm.
8.5 According to the installation requirements of the power distribution system. pleasc provide appropriate Circuit breakers to ensure the satfety of ihe staff and equipment.
9. Maintenance, inspection and storage
9.1 Maintenance and inspection should be carried out by professional personnel and all power should be cut off in advance.
9.2 To ensure good performance of the ATS, the first maintenancc and inspection should be carried out within 6 months of ulsc and at least once a year. In the case of severe installauion conditions. increase the frequency of maintenance and inspection.
9.3 Renewal and inspection projects
A. Plcase remove dust and dirt in case of failure,
B. Inspect electrical contacts for variations and damage, and slip out any mctal particles attached to or around the surface.
C. Rust, acidification and dust on the contact surface may lead to poor contact. Please operate manually several times and measure the contact resistancc whcn necessary.
D. Before using. plcase remove dust and dirtof ATS, duc to damp and suspended condition. Use a 500V me gohm mcter to measure the rejection resistance for normal supply, alternating power supply, load side bars, including insulation resistance between live parts and metal plates. And the insulation resistance should be no less than 10M■.
9.4 ATS shall be stored in an environment comparable to the normal working env ironment and shall be protected from dust, moisture and knock.



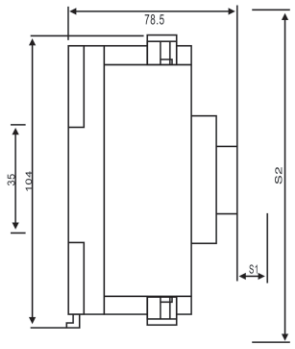
Appearance and installation dimensions





K1： Manual /Auto Select Switch
K2、K3： Product internal position switch
J:200V power relay
1:A power supply passive new number output
2:B power supply passive new number output

Internal Wieing Diagram

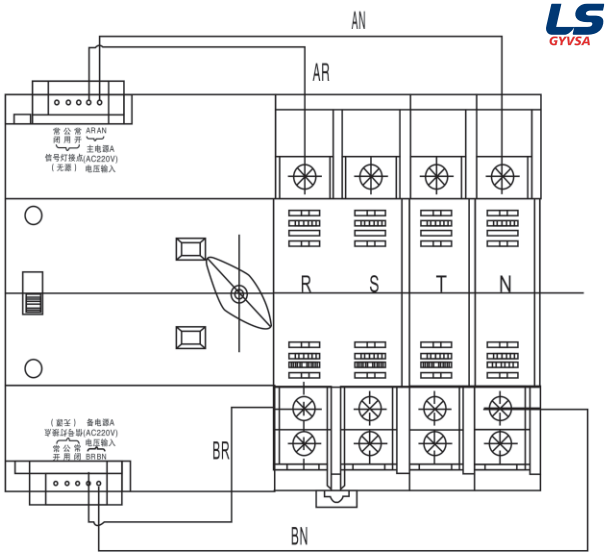


Product Size

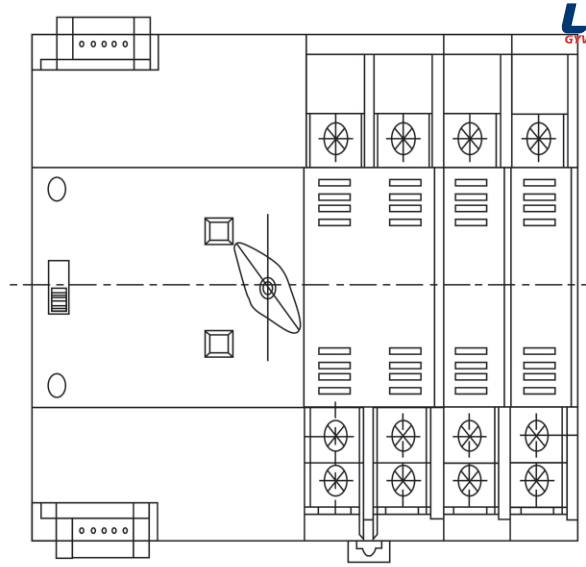
Size / Sidebar No.	A	B
2P	107.5	72
3P	125	78
4P	142.5	88

safe distance S1 □ 0mm
S2 □ 03mm

① On/Off Indicstor
② Common terminal block (AC200V)
③ Selector switch (manual/automatic)
④ manual knob
⑤ Common Power supply side main terminal
⑥ Standby power side main terminal
⑦ Load wiring side main terminal
⑧ power A indicator light
⑨ Power Bindicator light
⑩ spare terminal block (AC200V)



Controller Wiring Diagram



Picture 4: Instructions for correct installation