## Automatic Transfer Switch

 Instruction Manual(without controller)

## 1. General

Automatic transfer switch is one of adopted international ATSE technology developed by our company. It is suitable for power supply system with rated working voltage is AC 400 V , and $\mathrm{AC} 50 \mathrm{~Hz} / 60 \mathrm{~Hz}$. Automatic transfer switch is main used for high building, hospital, hotal and communication, coal mining, shipping, militiary facilities industrial assembly line etc the situation of need the continuous power supply. Normally the power could be utility, auto start genset,storage battery and so on.
Notice:
L type is two positions. When switch get the switching signal it will not stop at Off position, it will transfer to the other power source directly.
2. S type is three positions. When switch get the switching signal, it can transfer to the other power source directly, also can transfer to Off position.
3. Switch is PC Class.
4. Connect type is front panel connection.

## 2. Working conditions

2.1 Ambient air temperature:

Ambient air temperature of $-5^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$, and at 24-hour average temperature does not exceed $+35^{\circ} \mathrm{C}$. If ambient air temperature above $+40^{\circ} \mathrm{C}$ or below $-5^{\circ} \mathrm{C}$, users should consult with manufacturer.
2.2 Atmospheric humidity:

The maximum temperature of $+40^{\circ} \mathrm{C}$, the air relative humidity do not more than $50 \%$. At a lower temperature can be allowed to have a higher relative humidity. Special measures should be taken for occasional condensation due to temperature changes.
2.3 Installation Altitude:

The altitude of installation locations do not above 2,000 meters. For higher altitudes, please consult the manufacturer to take into account the reduced dielectric strength and cooling effect of the air
2.4 Pollution levels: Installation on grade III
2.5 Installation category: Installation category IV type
2.6 Installed tilt: Products in the cabinet fixed installation, the maximum inclination is $\pm 22.5^{\circ}$
2.7 Flashover distance: AC400V electric flashover distance is 30 mm . 2.8 Use category: AC-33iB.

## 3. Products model and meaning



## 4. Technical parameter

| Model |  | S type, L type |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Insulation voltage |  | AC690V |  |  |
| Rated voltage |  | AC400V |  |  |
| Rated current |  | 20A ~ 125A | 160A ~ 250A | 315A~630A |
| The rated impulse withstand voltage |  | 8KV |  |  |
| Vote number |  | Double vote |  |  |
| Wiring manner |  | Before the board |  |  |
| Characteristic | Short ime withstand current | 10kA |  |  |
|  | Connect sub-capacity | 17kA |  |  |
|  | Service life | 1000/5000 | imes 100 | 0/4000times |
|  | Operating cycle |  | 60times/hour |  |
| Useing class |  | AC-33iB |  |  |
| Auxiliary switch |  | A, B side power both with 2 normally open and 2 normally closed; switch capacity 15A/AC250V |  |  |
| Accessory |  | Manual handle |  |  |

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## 5. Connection diagram

$\square$ Connection diagram of power indication and power ON indication.

$\square$ Three positions S type terminal function connection diagram.

$\square$ Two positions $L$ type terminal function connection diagram.


## 6. Appearance and installation dimensions

The safe distance dimensions of panel: 30 mm (AC400V)


| Model | $$ | A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 125S } \\ & 125 \mathrm{~L} \end{aligned}$ | 2P | 223 | 100 | 15 | 26 | 30 | 27.5 | 4 |
|  | 3P | 253 | 130 |  |  |  |  |  |
|  | 4 P | 283 | 160 |  |  |  |  |  |
| $\begin{aligned} & 250 \mathrm{~S} \\ & 250 \mathrm{~L} \end{aligned}$ | 2 P | 231 | 111 | 20 | 31 | 35 | 30 | 4 |
|  | 3P | 266 | 146 |  |  |  |  |  |
|  | 4 P | 301 | 181 |  |  |  |  |  |

## 7. Manual operation and matters need attention

The safe distance dimensions of panel: $30 \mathrm{~mm}(\mathrm{AC} 400 \mathrm{~V}$ )



Stype three positions
The manner of I power input: Screwdriver press the "TWO ROAD POWER OFF", so I power and II power are both in the OFF position (L type no need shaft so that I power will place in ON position. The manner of ll power input: Screwdriver press OFF", so I power and II power are both in the OFF position (L type no need this operation). Then press the "GUIDE TO IIPOWER" and hold, while manually rotate the direction of the arrow shaft so that Il power will place in ON position.
The manner of artificial escape:(Only fit for S type, $L$ type can only transfer and can't release) Remove manual operating handle, screwdriver insert the hole of "TWO ROAD POWER OFF" and press inward to escape.
Note :

1. Manual is forbidden when switch with load conditions, manual operation is allowed when the controller must be in manual or power-off state.
2. The handle must be removed after operation.

## 8. Maintenance and storage

Check and maintenance must be conducted by the professional personnel, inspection and maintenance should be cut off when all the external electricity power. In order to maintain the performance of the switch and continue to year after installation, and maintenance regularly at least once a year.

