POWERPRODUCTS

USER MANUAL

YES1-63MA SERIES

Automatic Transfer Switch

Installation, operation and maintenance instructions

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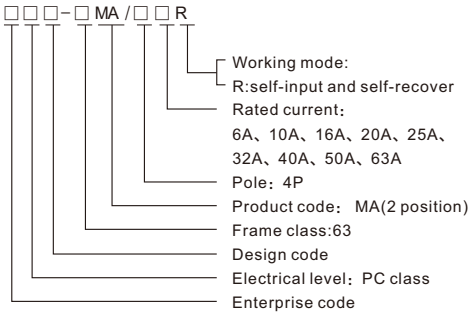
AUTOMATIC TRANSFER SWITCH

Keep this manual available for installation, commissioning and service personnel.

1.Description

This series of household dual power automatic transfer switchis the late st micro household power transfer switch developed by our company. The switch belongs to the PC class infrequent transfer switch , two positions structure , suitabl e for AC 50 / 60Hz , rated current 6A - 63A AC power distributi on system, mainly used to detect whether the user's power supply is normal or standby. When the common power supply is abnormal , immediately switch to the standby power supply, Switch inside the used mechanical and electric interlock, put an end to clear condition of two way power switch at the same time. so as to ensure the continuity, reliability and security of the power supply.

2.Type And Meaning



3.Performance And Features

- ☐ The excitation electromagnet is adopted for actuation, the conversion speed is extremely fast, and the control voltage is AC220V(AC110V can be customized).
- ☐ The switch body is provided with power-on indication of common power supply/standby power supply, and the switch state is clear.
- ☐ Automatic mode has the function of self-input and self-recover. When two power supplies exist at the same time, the common power supply gives priority to power supply.
- ☐ Rail installation mode, modular structure design, total weight < 0.9Kg,compact structure, small volume and convenient installation and maintenance.

4.Main Technical Parameters

Frame Class	63								
Rate Working Current Ie	6A	10A	16A	20A	25A	32A	40A	50A	63A
Rated Insulation Voltage Ui	690V								
Rated Impulse Withstand Voltage Uimp	8kV								
Rated Working Voltage Ue	AC400V								
Rated Frequency	50/60Hz								
Using Category	AC-31B								
Transfer Time	≤70ms								
Mechanical life	≥6000 times								
Electrical life	≥1500 times								

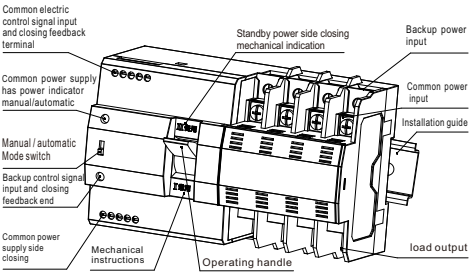
5.Working Conditions

- ☐ The operating ambient temperature ranges from −5℃ to +40℃ ,and the average temperature within 24 hours does not exceed +35℃ . The storage ambient temperature ranges from −25 ℃ to +55℃, and can reach +70℃ in a short time (within 24 hours).
- ☐ The altitude of the installation site not exceed 2000m.
- ☐ The relative humidity of the air at the installation site does not exceed 50% when the ambient air temperature is +40 ℃ .The relative humidity can be higher at a lower temperature. For example, when the average minimum temperature in the wettest month is +20℃ , the monthly average maximum relative humidity can reach 90%. Appropriate measures should be taken to prevent condensation due to temperature changes.
- ☐ Pollution Class 3 (conductive pollution, or dry non conductive pollution to conductive due to condensation). ATS can be installed in the cabinet vertically or horizontally. If you have special installation requirements, please contact us.
- ☐ The protection grade of the shell is ip30.
- ☐ Overvoltage category: Main circuit Class III; Control and auxiliary circuits, Class II.

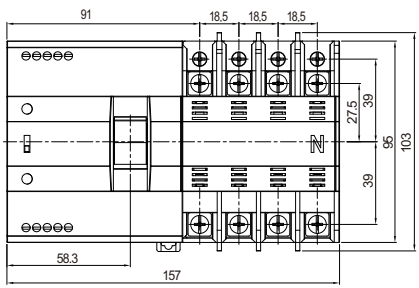
6.Precautions Before Operation

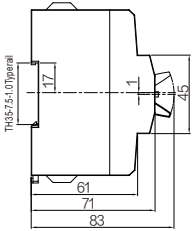
- ☐ Operate the clearance to check whether the input voltage is comply with requirements control voltage is AC220V, switch to normal working voltage range required for AC187V - AC253V.
- ☐ This switch has an undervoltage detection function (single-phase detection). When the phase of the I power supply is missing or the voltage is below 165V, the switch switches to the II power supply (provided that the voltage of the II power supply is greater than 187V). When the voltage of the I power supply recovers to above 187V, the switch automatically returns to the I power supply.
- ☐ First, test whether the ATS works normally in the manual state. Then, set the toggle switch to the automatic position for testing. Only after the ATS is qualified can it be put into use.
- ☐ If you need to operate the switch manually, you must first toggle the mode switch to the "manual" mode.

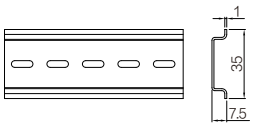
7.Product Structure

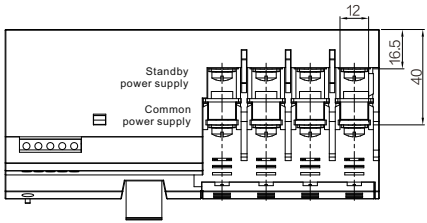


8.Outline And Installing Dimensions



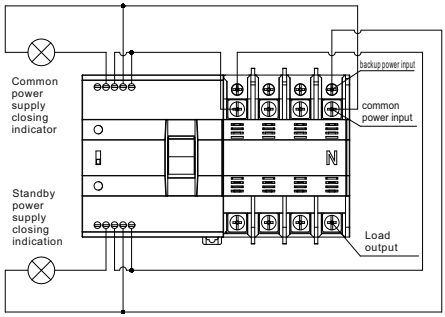




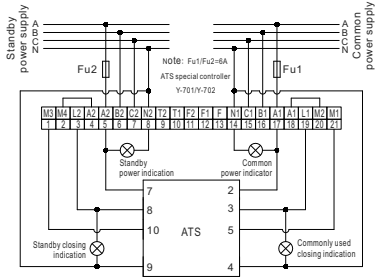


9.Product Installation And Wiring

☐ One-piece:



☐ With separate controller:



10.Maintenance

☐ All external power supply must be cut off before maintenance and inspection, and professional personnel shall carry out the operation.

☐ To ensure that the ATS is in good condition, perform the first maintenance and check within six months after installation and at least once a year thereafter. The frequency of maintenance and inspection should be increased when installation conditions are harsh.

11.Common Faults And Solutions

☐ To prevent dust and dirt from causing malfunction, please remove them in time.

☐ Please check whether the electrical contact parts are deformed and damaged, and remove the contact surface and metal particles and burn marks around it.

☐ Rust, acidification and dust on the contact surface can cause poor contact. Please operate manually operate ATS several times, and measure the contact resistance when necessary.

☐ If ATS is slightly damp or unused for a long time,it should be dried prior to power connection. After removing dust and dirt, use 500V megohmmeter to measure the insulation resistance between the common, standby and load terminals and their poles, including all the live parts and the installation guide rails. The insulation resistance should be no less than 10 mΩ before use.

CONTACT & SUPPORT

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AFTER-SALES SERVICE Please quote the ATS model, rated current and product details when requesting support.