**HONGTONGAAD 110V 100A 2P**

# HONGTONGAAD Din Rail ATS Dual Power Automatic Transfer Switch User Manual

Model: 110V 100A 2P

## 1. Introduction

This manual provides essential information for the safe installation, operation, and maintenance of your HONGTONGAAD Din Rail ATS Dual Power Automatic Transfer Switch. This device is designed to automatically switch between a normal power supply and a backup power supply, ensuring continuous power to connected loads.

Key features include:

- Automatic or manual operation mode.
- Din rail mounting for easy installation and maintenance.
- Stable performance for various applications including factories, laboratories, and farms.
- Immediate transfer to backup power upon normal power supply abnormality.
- Automatic return to normal power supply when restored.

## 2. Safety Information

Please read and understand all safety instructions before installing or operating this device. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Qualified Personnel Only:** Installation and maintenance should only be performed by qualified electricians.
- **Disconnect Power:** Always disconnect all power sources before working on the switch or connected circuits.
- **Proper Wiring:** Ensure all wiring is correctly sized and terminated according to local electrical codes and the provided wiring diagram.
- **Environmental Conditions:** Do not expose the device to moisture, extreme temperatures, or corrosive environments.

- **Inspect for Damage:** Before installation, inspect the device for any physical damage. Do not install damaged equipment.

## 3. Product Overview

The HONGTONGAAD Automatic Transfer Switch is designed for reliable power source management. It features a robust housing and clear indicators for operational status.


Figure 1: HONGTONGAAD Din Rail ATS Dual Power Automatic Transfer Switch (110V 100A 2P model).

The switch includes terminals for common power input (Source A), backup power input (Source B), and load output. It also features control lines for both sources and a manual/auto selector switch.

## 4. Specifications

| Feature | Specification |
|---|---|
| Model | 110V 100A 2P |
| Rated Working Current | 100A |
| Rated Working Voltage | 110V AC |
| Poles | 2P |
| Insulation Voltage | 690V AC |

| Feature | Specification |
|---|---|
| Impact-Resistant Voltage | 8kV |
| Frequency Standard | 50/60Hz, IEC/EN60947-6-1 |
| Product Dimensions (L x W x H) | 0.39 x 0.39 x 0.39 inches (approximate) |
| Item Weight | 2.2 pounds |
| Installation | Din Rail Mounted |


Figure 2: Dimension Diagram. A: Length (104mm), B: Height (35mm), C: Length (75.5mm), D: Height (105.5mm). Note: Dimensions are approximate and for reference only.

## 5. Setup and Installation

Installation must be performed by a qualified electrician in compliance with all applicable electrical codes and standards.

## 5.1 Mounting

- Mount the ATS switch securely onto a standard Din rail within an appropriate electrical enclosure.
- Ensure adequate clearance for wiring and ventilation.

## 5.2 Wiring Diagram

Refer to the following diagram for proper wiring connections. Ensure all connections are tight and secure.

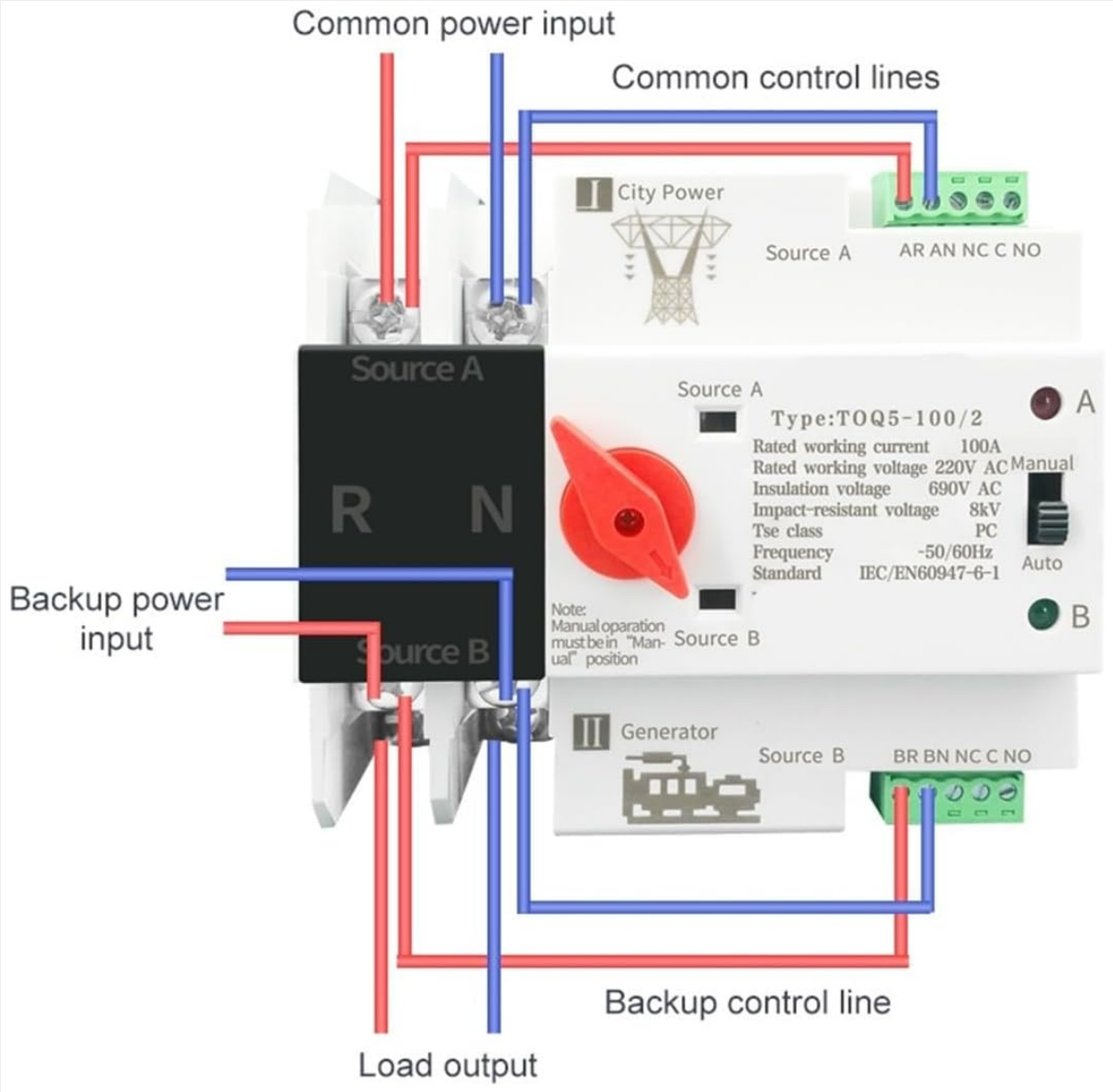


Figure 3: Wiring Diagram. Connect Common Power Input (Source A) and Backup Power Input (Source B) to their respective terminals. Connect Load Output. Connect Common Control Lines (AR AN NC NO) and Backup Control Line (BR BN NC NO) as indicated.

- **Common Power Input (Source A):** Connect your primary power source (e.g., utility grid) to the 'Source A' terminals.
- **Backup Power Input (Source B):** Connect your secondary power source (e.g., generator) to the 'Source B' terminals.
- **Load Output:** Connect the circuits or devices requiring uninterrupted power to the 'Load Output' terminals.
- **Control Lines:** Connect the control lines as specified in the diagram for automatic operation.

After wiring, double-check all connections before restoring power.

## 6. Operating Instructions

The ATS switch supports both automatic and manual operation modes.

### 6.1 Automatic Mode

- Set the selector switch on the device to the 'Auto' position.
- In this mode, the switch will automatically monitor the common power supply (Source A).
- If Source A fails or becomes abnormal, the switch will automatically transfer the load to the backup power supply (Source B).
- When Source A is restored and stable, the switch will automatically transfer the load back to Source A.

### 6.2 Manual Mode

- Set the selector switch on the device to the 'Manual' position.
- In manual mode, the user can manually switch between Source A and Source B using the lever.
- **Important:** Manual operation must be performed carefully. Ensure the desired source is stable before switching.

## 7. Maintenance

Regular maintenance helps ensure the longevity and reliable operation of your ATS switch.

- **Periodic Inspection:** Annually, or more frequently in harsh environments, inspect the switch for any signs of wear, damage, or loose connections.
- **Cleaning:** Keep the device clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Terminal Tightness:** Periodically check and tighten all terminal connections to prevent overheating and arcing.
- **Functionality Test:** Periodically test the automatic transfer function by simulating a power outage for Source A (if safe to do so).

Always disconnect power before performing any maintenance.

## 8. Troubleshooting

If you encounter issues with your ATS switch, consider the following common troubleshooting steps:

- **No Power to Load:**
  - Check if both Source A and Source B are active and providing power.
  - Verify all wiring connections are secure and correct.
  - Ensure the selector switch is in the desired position (Auto or Manual).
- **Failure to Transfer Automatically:**
  - Confirm the switch is in 'Auto' mode.
  - Check the control line connections for both sources.
  - Ensure the backup power source (Source B) is operational and providing stable power.

- **Overheating:**
  - Check for loose terminal connections.
  - Ensure the load current does not exceed the rated current of the switch (100A).
  - Verify adequate ventilation around the device.

If problems persist after troubleshooting, contact qualified technical support.

## 9. Warranty Information

This HONGTONGAAD product is covered by a manufacturer's warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary. Please retain your proof of purchase for warranty claims.

For detailed warranty information, please refer to the documentation provided with your purchase or contact the manufacturer directly.

## 10. Support

For technical assistance, product inquiries, or support, please contact HONGTONGAAD customer service. Contact details can typically be found on the product packaging or the manufacturer's official website.

When contacting support, please have your product model (110V 100A 2P) and any relevant purchase information ready.