

## RWRAPS W2R ATS 2P

# RWRAPS W2R ATS 2P Automatic Transfer Switch User Manual

Model: W2R ATS 2P (2P 63A 110V)

## 1. INTRODUCTION

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The RWRAPS W2R ATS 2P Automatic Transfer Switch is designed to ensure a continuous power supply by automatically switching between a primary power source (Source A, typically City Power) and a secondary power source (Source B, typically a Generator) when the primary source becomes unavailable. This manual provides essential information for the safe and effective installation, operation, and maintenance of your W2R ATS 2P. Please read this manual thoroughly before installation and operation.

## 2. SAFETY INFORMATION AND WARNINGS

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**WARNING:** Electrical installation should only be performed by qualified personnel. Ensure all power is disconnected before installation or maintenance to prevent electric shock.

- The rated voltage of both the common (Source A) and backup (Source B) power supplies must be within the range of 85%-110% of the device's rated voltage (e.g., 110V for this model).
- The current supplied by each source should not be less than 5A. Failure to adhere to these voltage and current specifications may cause the internal coil to overheat or spontaneously burn, leading to device failure or fire.
- If your local power grid experiences unstable voltage fluctuations, it is strongly recommended to integrate external voltage protectors into your electrical system to safeguard the ATS and connected equipment.
- Ensure proper grounding of the device according to local electrical codes.

## 3. PRODUCT OVERVIEW

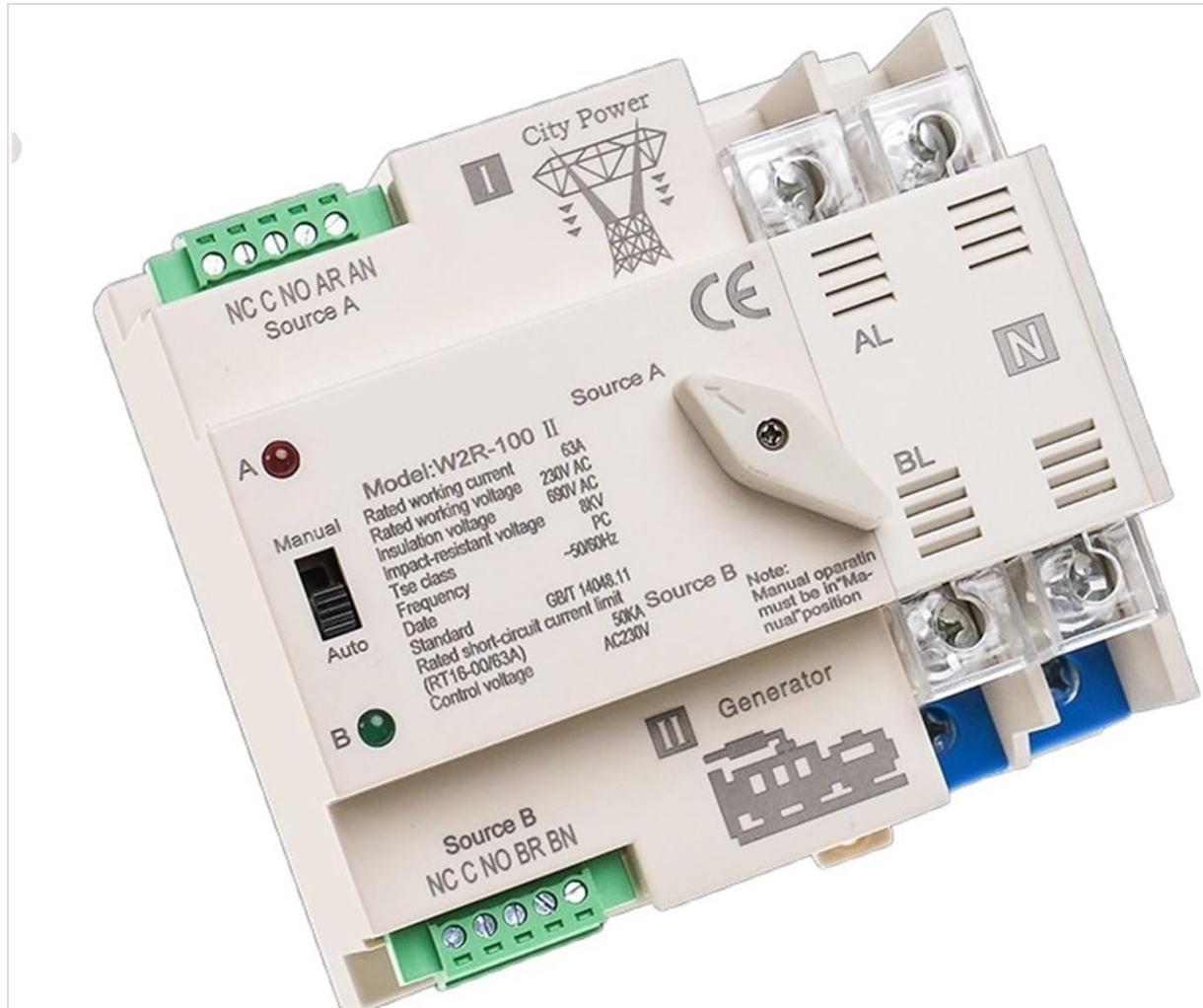
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### 3.1 Key Features

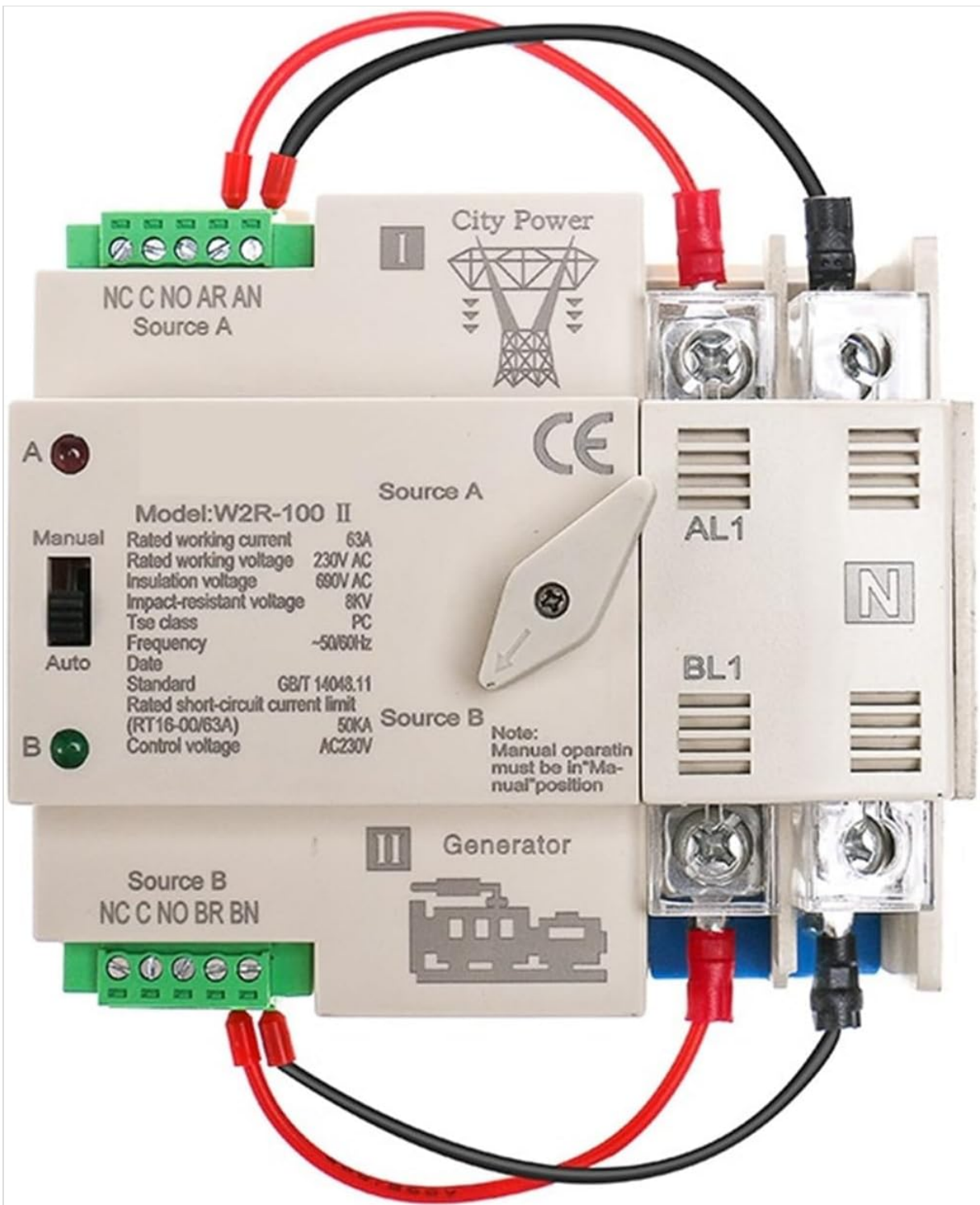
- **Silver Contacts:** Utilizes silver contacts to enhance conductivity and extend product lifespan.
- **Easy Monitoring:** Features a built-in signal output port for connection to an indicator light, allowing convenient observation of the switch status from outside an enclosure.

- **Robust Construction:** Designed with good insulation properties, high-temperature resistance, and anti-aging materials for safe and reliable operation.
- **Automatic Power Transfer:** Automatically switches to the backup power supply when the normal power supply is interrupted, ensuring continuity, reliability, and safety of the power supply.
- **Versatile Application:** Suitable for automatically transferring loads between main power and backup power sources.

### 3.2 Component Identification



**Figure 1: Front View of the W2R ATS 2P.** This image displays the main components including the manual/auto selector switch, indicators for Source A and Source B, and connection terminals for both power sources. The labels "City Power" and "Generator" indicate typical applications for Source A and Source B, respectively.



**Figure 2: Wiring Diagram Example.** This view illustrates typical wiring connections for the main power (Source A) and backup power (Source B), showing the input terminals and the output terminals for the load. Red and black wires indicate live and neutral connections.



**Figure 3: Side View of Terminals.** A close-up view of the power connection terminals, showing the robust screw-type connectors for secure wiring.



**Figure 4: Bottom View with Mounting Points.** This image shows the underside of the unit, highlighting the mounting points for secure installation within an electrical panel or enclosure.

## 4. INSTALLATION AND SETUP

1. **Preparation:** Ensure all power sources (main and backup) are completely disconnected before beginning installation. Verify that the installation environment is dry, well-ventilated, and free from corrosive gases or excessive dust.
2. **Mounting:** Securely mount the ATS unit in an appropriate electrical enclosure using the designated mounting points (refer to Figure 4). Ensure adequate space for wiring and ventilation.
3. **Wiring Source A (Main Power):** Connect the main power supply (e.g., City Power) to the "Source A" terminals. Ensure correct polarity for live (L) and neutral (N) connections. Refer to Figure 2 for a typical wiring example.
4. **Wiring Source B (Backup Power):** Connect the backup power supply (e.g., Generator) to the "Source B" terminals. Ensure correct polarity for live (L) and neutral (N) connections.
5. **Load Connection:** Connect the electrical load (circuits to be powered) to the output terminals of the ATS.
6. **Control Wiring (Optional):** If using external signal indicators, connect them to the built-in signal output port as per the wiring diagram (not explicitly shown in provided images, but mentioned in features).
7. **Verification:** Double-check all wiring connections for tightness and correctness. Ensure no loose strands or

short circuits.

**IMPORTANT:** Incorrect wiring can lead to severe damage to the device, property, or personal injury. If you are unsure about any step, consult a qualified electrician.

## 5. OPERATING INSTRUCTIONS

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The RWRAPS W2R ATS 2P features a selector switch for choosing between "Manual" and "Auto" operation modes.

- **Auto Mode:** In this mode, the ATS will automatically detect the presence of power from Source A (main power). If Source A fails, the switch will automatically transfer the load to Source B (backup power). When Source A is restored, the switch will automatically transfer the load back to Source A. This is the recommended mode for uninterrupted power supply.
- **Manual Mode:** In Manual mode, the transfer switch will remain in its current position (either connected to Source A or Source B) until manually operated. To switch between sources in Manual mode, physically move the selector lever to the desired source position (A or B).

**Note:** As indicated on the device (refer to Figure 1), manual operation requires the selector switch to be in the "Manual" position. Attempting to manually override the switch while in "Auto" mode may cause damage.

After installation and before energizing, ensure the selector switch is set to the desired operating mode.

## 6. MAINTENANCE

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

- **Periodic Inspection:** Annually inspect the unit for any signs of physical damage, loose connections, or discoloration due to overheating.
- **Cleaning:** With power disconnected, gently clean the exterior of the unit with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Terminal Check:** Periodically check the tightness of all terminal screws. Loose connections can cause resistance, heat buildup, and potential failure.
- **Functionality Test:** If safe to do so, periodically test the automatic transfer function by simulating a power outage from Source A to ensure the switch operates correctly.

Always disconnect power before performing any maintenance.

## 7. TROUBLESHOOTING

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If you encounter issues with your RWRAPS W2R ATS 2P, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
ATS does not transfer automatically.	<ul style="list-style-type: none"><li>• Switch is in "Manual" mode.</li><li>• No power detected from Source A or Source B.</li><li>• Control voltage issue.</li></ul>	<ul style="list-style-type: none"><li>• Set selector switch to "Auto" mode.</li><li>• Verify power supply to both sources.</li><li>• Check control voltage connections and levels.</li></ul>

Problem	Possible Cause	Solution
Overheating or burning smell.	<ul style="list-style-type: none"> <li>• Incorrect voltage or current (below 5A).</li> <li>• Loose wiring connections.</li> <li>• Overload condition.</li> </ul>	<ul style="list-style-type: none"> <li>• Immediately disconnect power. Verify voltage and current specifications.</li> <li>• Check and tighten all wiring connections.</li> <li>• Reduce load or ensure load is within ATS capacity.</li> </ul>
No power to load.	<ul style="list-style-type: none"> <li>• Both Source A and Source B are off.</li> <li>• ATS is stuck in an intermediate position.</li> <li>• Internal fault.</li> </ul>	<ul style="list-style-type: none"> <li>• Verify power to both sources.</li> <li>• Check selector switch position. If in "Auto", try switching to "Manual" and back to "Auto" (with caution).</li> <li>• Contact customer support if problem persists.</li> </ul>

For issues not covered here, or if troubleshooting steps do not resolve the problem, contact RWRAPS customer support.

## 8. SPECIFICATIONS

<b>Model</b>	W2R ATS 2P (W2R-100 II as seen on device label)
<b>Rated Working Current</b>	63A (for this specific variant)
<b>Rated Working Voltage</b>	110V (for this specific variant)
<b>Insulation Voltage</b>	690V AC
<b>Impact-Resistant Voltage</b>	8kV
<b>Tse Class</b>	PC
<b>Frequency</b>	~50/60Hz
<b>Standard</b>	GB/T 14048.11
<b>Rated Short-Circuit Current Limit</b>	50kA (RT16-00/63A)
<b>Control Voltage</b>	AC230V (Note: This value is from the device label and may vary by specific model/variant. Please verify compatibility with your system.)
<b>Item Weight</b>	2.2 pounds (approximately 1 kg)
<b>Manufacturer</b>	RWRAPS

## 9. WARRANTY AND SUPPORT

Specific warranty details for the RWRAPS W2R ATS 2P Automatic Transfer Switch are not provided in this manual. For information regarding warranty coverage, technical support, or service, please contact the manufacturer or your point of purchase directly.

When contacting support, please have your product model (W2R ATS 2P) and ASIN (B0CF5H3X44) available.

