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› DEWIN Automatic Dual Power Transfer Switch 2P 100A 220V Instruction Manual

DeWin 2P 100A 220V

DEWIN Automatic Dual Power Transfer Switch

Model: 2P 100A 220V

Brand: DeWin

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your DEWIN Automatic Dual Power Transfer Switch. This device is designed to automatically switch between two power sources, typically a photovoltaic (PV) system or generator and the city power grid, ensuring a continuous power supply for compatible installations.

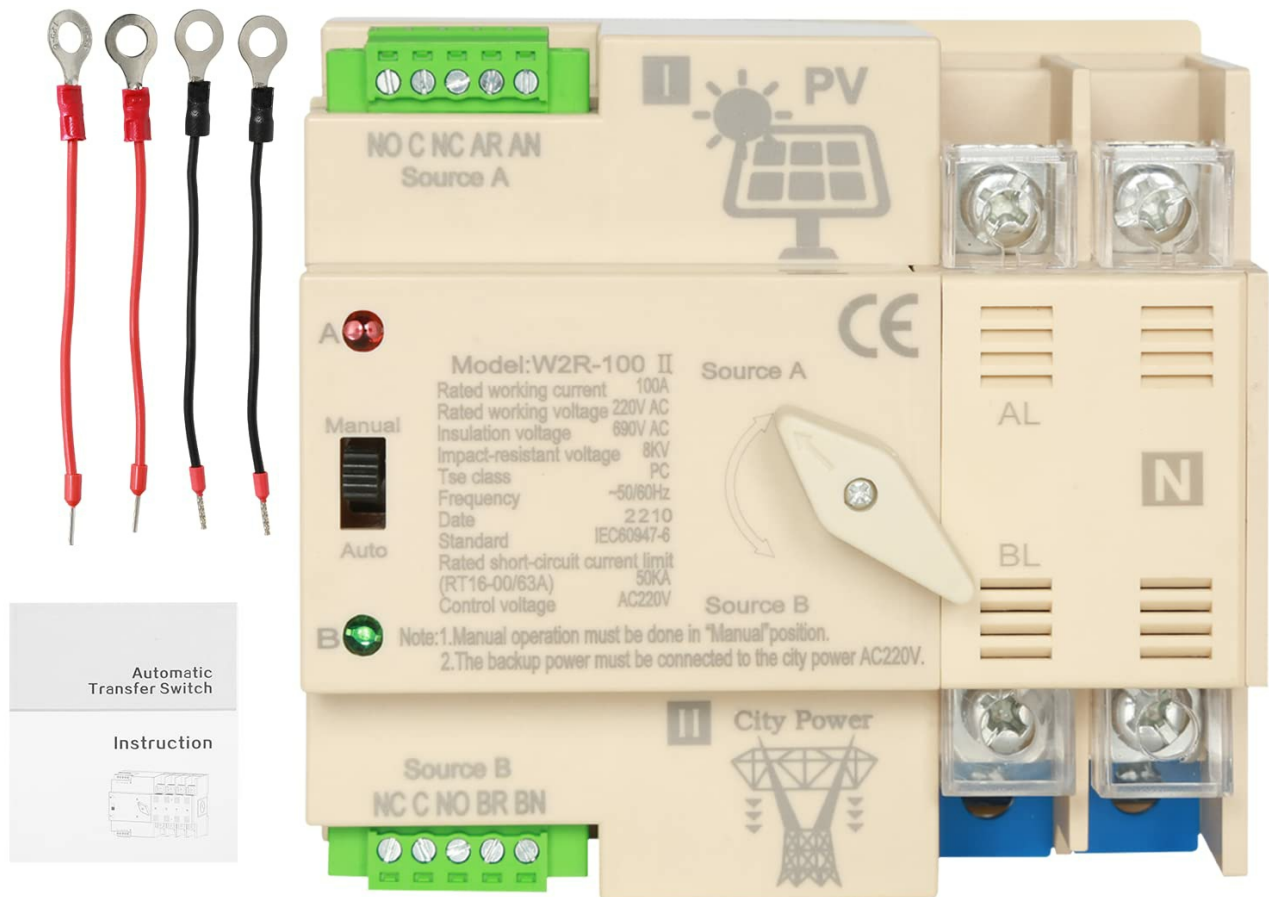


Figure 1.1: Front view of the DEWIN Automatic Dual Power Transfer Switch. This image shows the compact design suitable for DIN rail mounting within a household distribution box.

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.

- Installation and maintenance should only be performed by qualified electricians.
- Ensure all power sources are disconnected before performing any wiring or maintenance.
- Do not operate the switch if it is damaged or appears to be malfunctioning.
- This device is designed for specific voltage and current ratings. Do not exceed these limits.
- The product is made from high-quality flame-retardant materials, but proper ventilation and installation are still crucial.

3. PRODUCT FEATURES

- **High-Quality Construction:** Manufactured from flame-retardant materials, offering good insulation, high-temperature resistance, and anti-aging properties for enhanced safety and reliability.
- **Automatic Transfer:** Designed for seamless automatic switching between primary (e.g., PV/Inverter) and secondary (e.g., City Power) sources.
- **Fast Switching:** Features a rapid response time of less than 0.05 seconds, ensuring minimal interruption to electrical appliances during power transitions.
- **DIN Rail Mounting:** Compatible with standard 35mm DIN rails for easy integration into existing electrical panels.
- **Versatile Application:** Suitable for various scenarios requiring dual power source management, including residential, commercial, and industrial settings.

4. SPECIFICATIONS

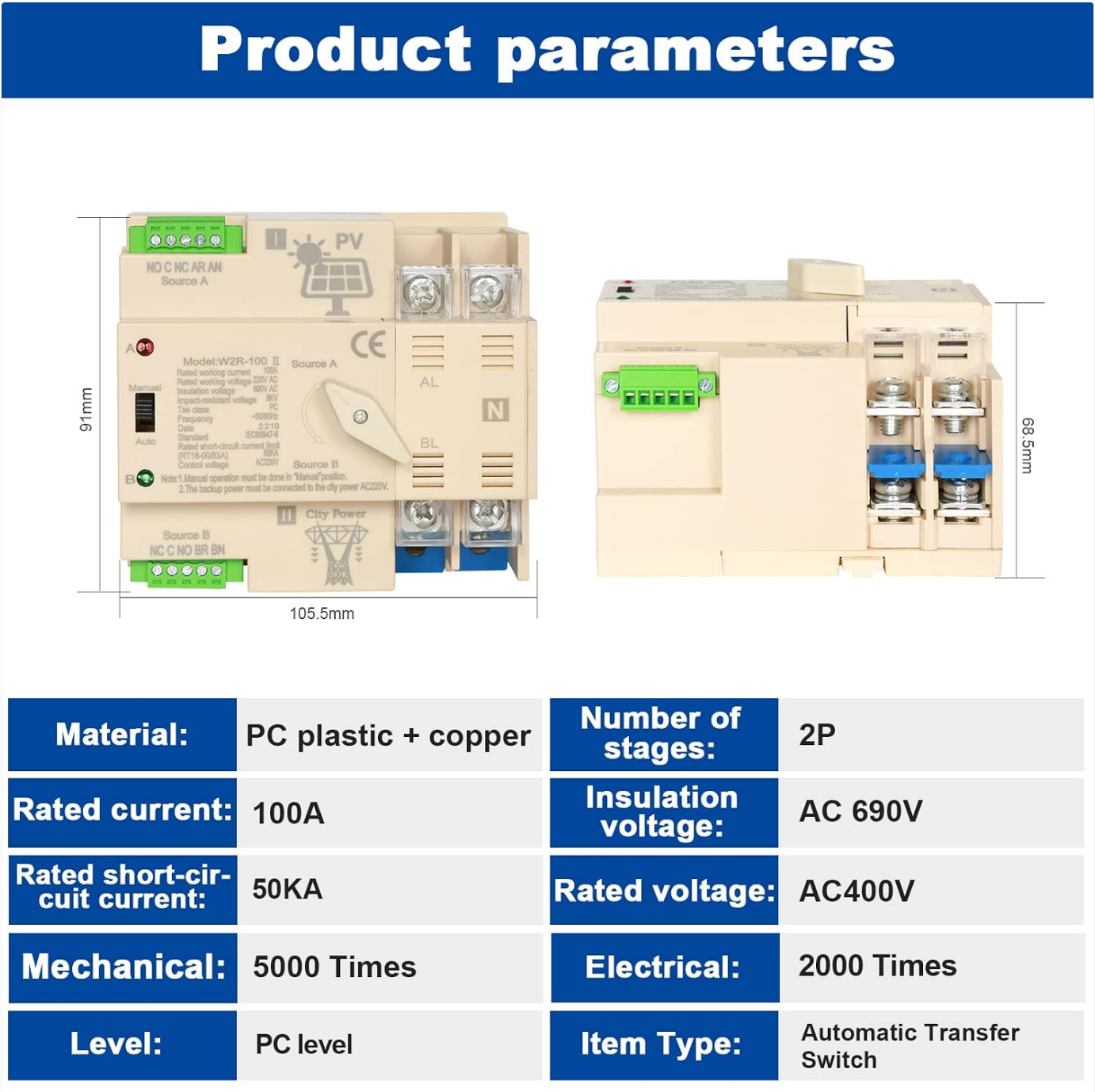


Figure 4.1: Product parameters and dimensions.

Parameter	Value
Model	2P 100A 220V
Brand	DeWin
Operating Mode	ON-OFF (Manual/Auto Selector)
Rated Current	100 A
Operating Voltage	220 Volts AC
Insulation Voltage	AC 690V
Rated Short-Circuit Current	50KA
Mechanical Life	5000 Times
Electrical Life	2000 Times
Contact Type	Normally Open
Connector Type	Crimp
Switch Type	Electromechanical
Terminal	Quick Connect
Material	PC Plastic, Copper
Circuit Type	2-way
Mounting Type	35mm DIN Rail Mount
Number of Positions	2
Max Rated Temperature	40 Degrees Celsius
Compatible Devices	PV installations, generators, city power, etc.
Color	Black or Grey

5. INSTALLATION

The DEWIN Automatic Dual Power Transfer Switch is designed for 35mm DIN rail mounting. Ensure the installation location is dry, well-ventilated, and within the specified temperature range.

5.1 Mounting

1. Verify that the junction box or electrical panel has sufficient space for the switch (dimensions: 78mm height, 105.5mm width).
2. Clip the switch onto a standard 35mm DIN rail securely.

5.2 Wiring

Refer to the wiring diagram below for correct connections. All wiring must comply with local electrical codes and standards.

Product wiring diagram

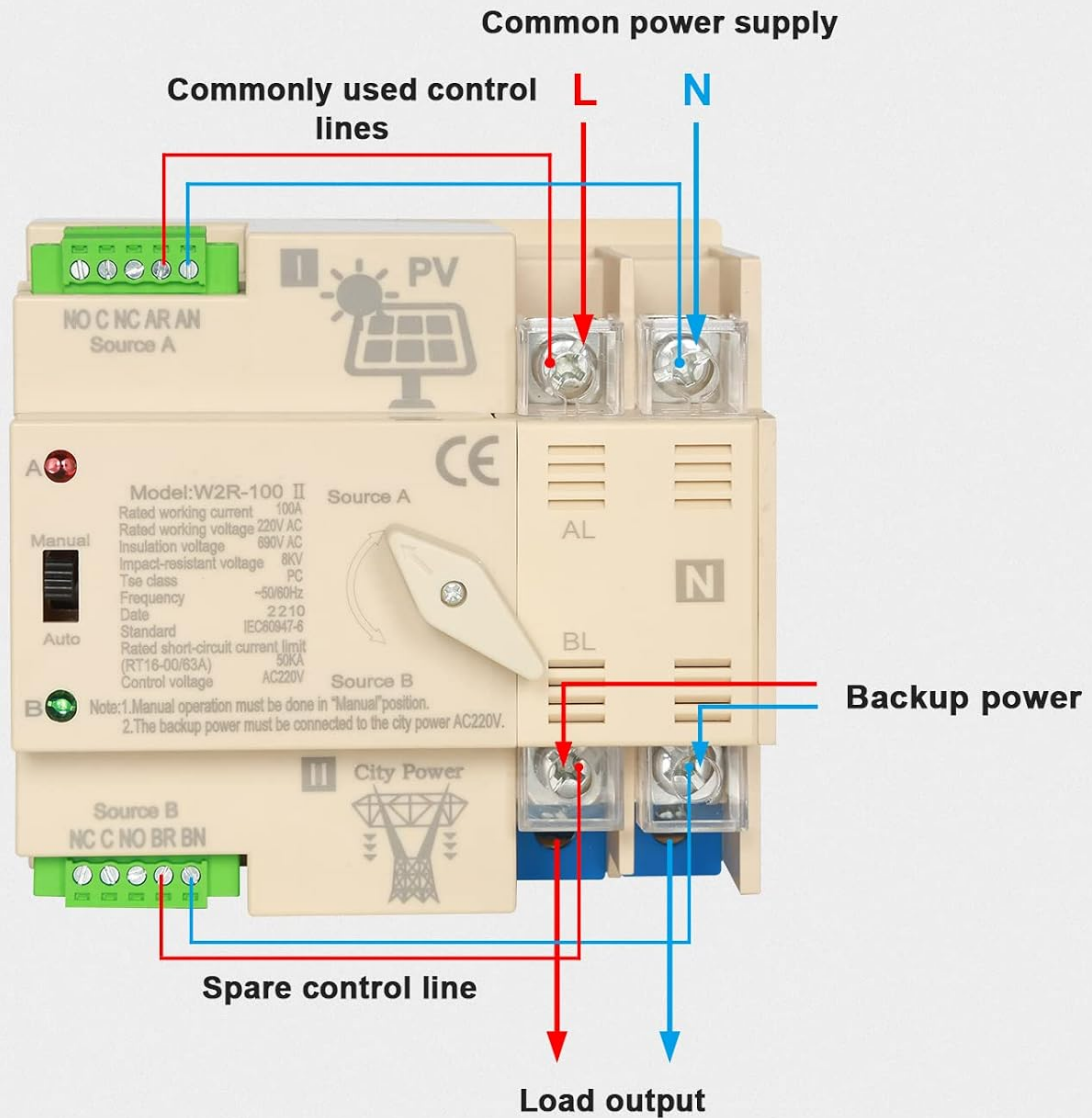


Figure 5.1: Product wiring diagram.

- **Common Power Supply (Source A):** Connect your primary power source (e.g., PV system/inverter output) to the terminals labeled 'Source A'.
- **Backup Power Supply (Source B):** Connect your secondary power source (e.g., City Power) to the terminals labeled 'Source B'.
- **Load Output:** Connect your electrical load to the 'Load output' terminals.
- **Control Lines:** Connect the common control lines (L and N) and spare control line as indicated in the diagram.

Ensure all connections are tight and secure. Double-check all wiring before restoring power.

UNINTERRUPTIBLE POWER SUPPLY

Dual power transformer
AUTO transfer between **Solar Power** & **City Power**

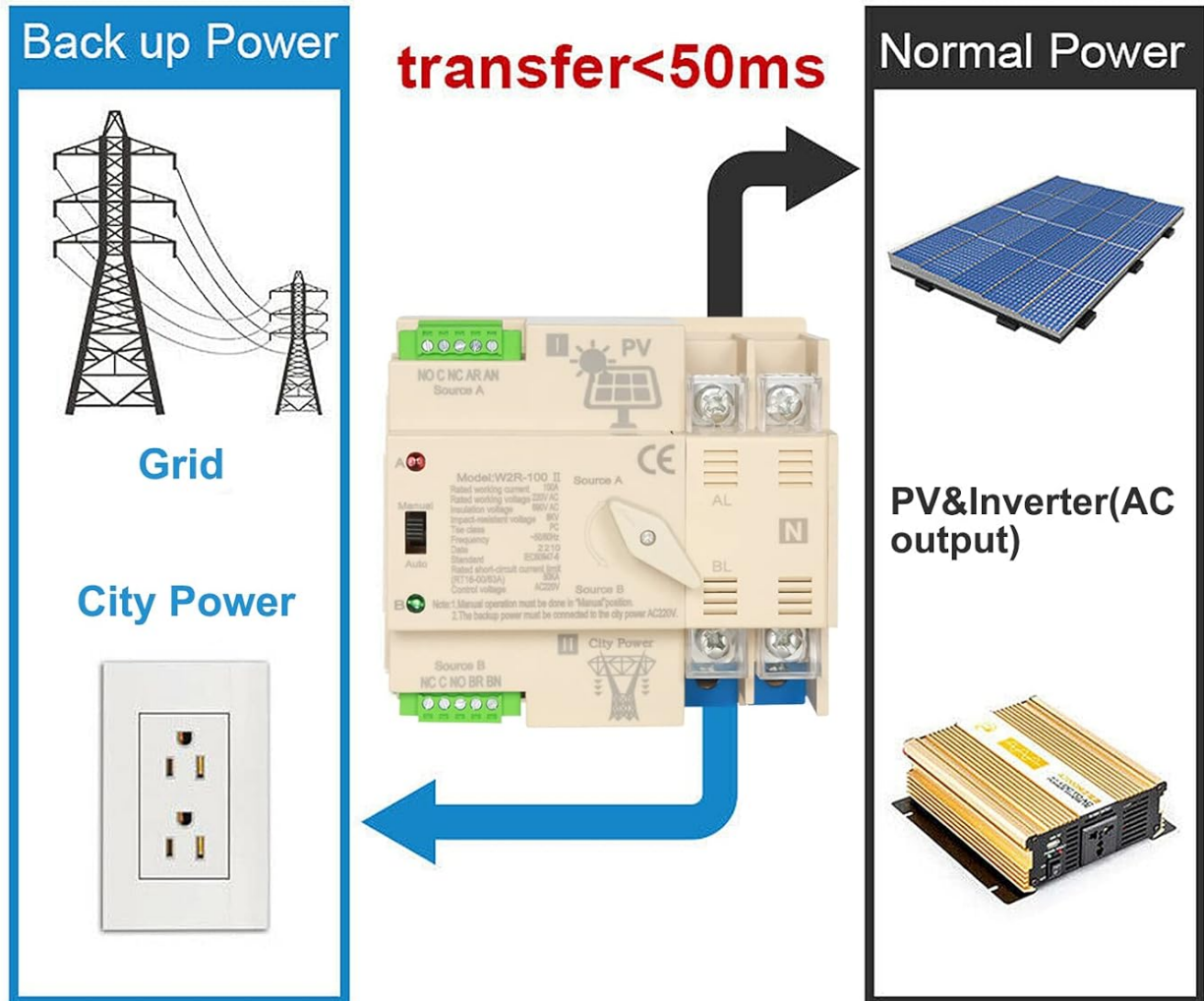


Figure 5.2: Uninterruptible power supply concept with dual power transformer.

6. OPERATING INSTRUCTIONS

The DEWIN Automatic Dual Power Transfer Switch offers both manual and automatic operation modes.

Dual power automatic transfer switch

Millisecond-level rapid switching, the switching time is less than 0.05 seconds, and the electrical appliances are not powered off during switching.

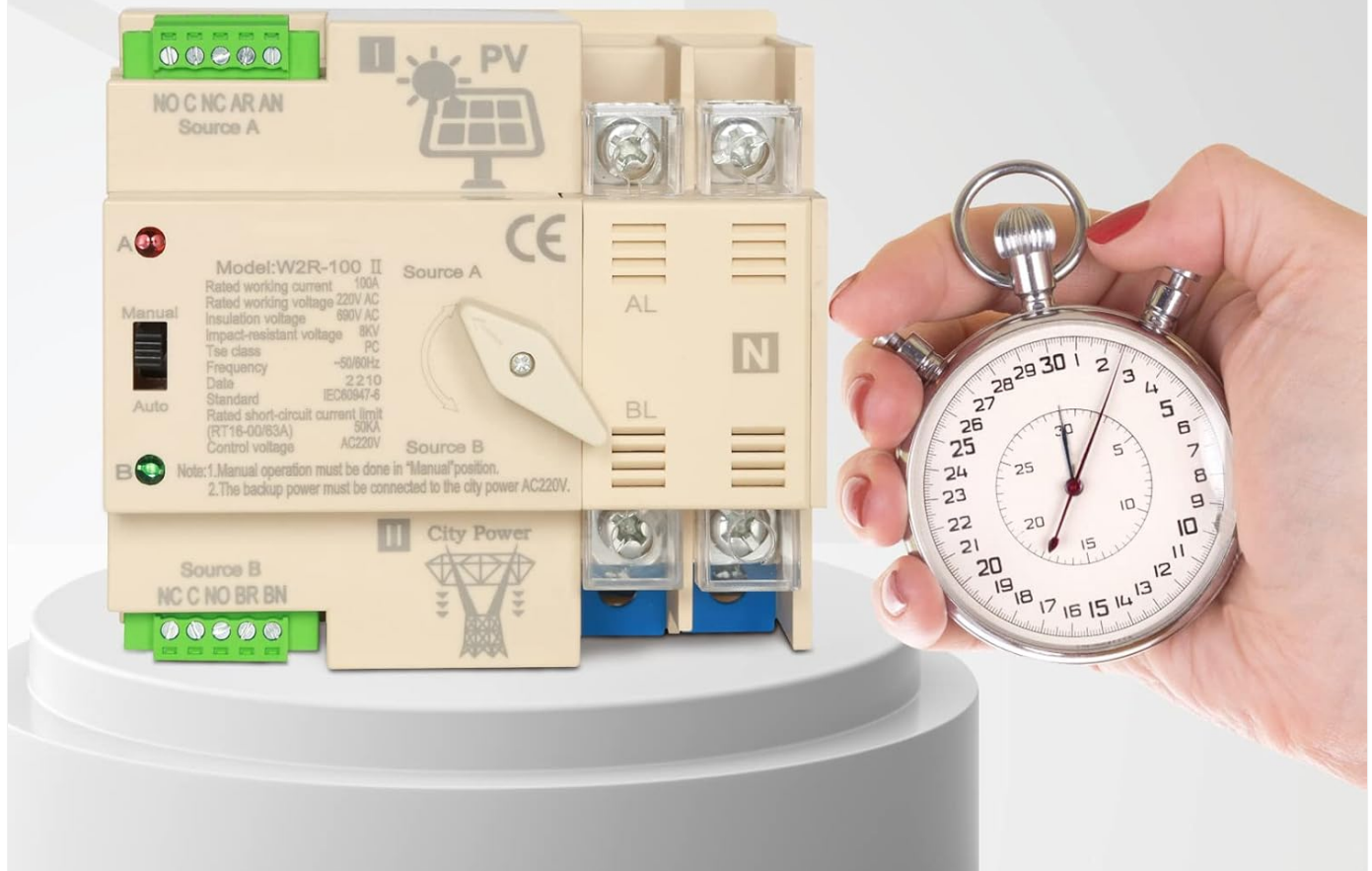


Figure 6.1: The switch features a selector for Manual or Auto mode, demonstrating its rapid transfer capability.

6.1 Mode Selection

- **Automatic Mode (Auto):** Set the selector switch to 'Auto'. In this mode, the switch will automatically detect the availability of power sources and transfer the load to the active source. It prioritizes Source A (PV/Inverter) if available, otherwise switches to Source B (City Power).
- **Manual Mode (Manual):** Set the selector switch to 'Manual'. In this mode, the user must manually select the desired power source. This is typically used for testing or specific maintenance scenarios.

6.2 Power Transfer

- When operating in 'Auto' mode, the switch continuously monitors both power sources.
- Upon detection of a power failure in the primary source, the switch will automatically transfer the load to the secondary source within 0.05 seconds, provided the secondary source is active.
- When the primary power source is restored, the switch will automatically transfer the load back to the primary source.

Note: Automatic switching only occurs when the backup power source is active. If the backup power (e.g., generator) is not running or its fuse protection is not active, manual intervention may be required to activate it before the switch can transfer.

7. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your transfer switch.

- **Periodic Inspection:** Annually inspect the switch for any signs of physical damage, loose connections, or overheating.
- **Cleaning:** Keep the switch clean and free from dust and debris. Use a dry, non-abrasive cloth for cleaning. Do not use liquids or solvents.
- **Terminal Check:** Periodically check all terminal connections to ensure they remain tight. Loose connections can cause overheating and malfunction.
- **Professional Service:** For any complex issues or internal repairs, contact a qualified electrician or the manufacturer's support.

8. TROUBLESHOOTING

If you encounter issues with your transfer switch, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No power to load	Both power sources are off or unavailable.	Check both primary and backup power sources. Ensure they are active.
Switch does not transfer automatically	Switch is in 'Manual' mode. Backup power source is not active.	Set the selector switch to 'Auto'. Ensure the backup power source (e.g., generator) is running and providing power. Check its fuse protection.
Overheating or burning smell	Loose connections. Overload. Internal fault.	Immediately disconnect power. Check all wiring connections for tightness. Reduce load if overloaded. If problem persists, contact a qualified electrician.
Flashing LED indicators (if present)	Indicates a specific status or error.	Refer to any specific indicator guides provided with the product. If none, consult a qualified electrician.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided at the time of purchase or contact your vendor. Keep your purchase receipt as proof of purchase.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question