

Huayong NLQ1-63/4P (2P 125A)

Huayong NLQ1-63/4P 63A Dual Power Automatic Transfer Switch (2P 125A) User Manual

Model: NLQ1-63/4P (2P 125A)

1. PRODUCT OVERVIEW

The Huayong NLQ1-63/4P Dual Power Automatic Transfer Switch (ATS) is designed to automatically switch between a primary (city) power supply and a backup power supply. This ensures continuous and reliable power delivery to connected loads, particularly in critical applications where power interruptions must be minimized. It is suitable for various environments, including residential, commercial, and industrial settings.

The switch housing is constructed from flame-retardant material, offering flame resistance, ruggedness, and corrosion resistance. It features all-copper silver point contacts for good conductivity and high connection efficiency.

This model, the 2P 125A variant, is specifically designed for home track TV installations and is compatible with Pz30 distribution boxes.

2. SAFETY INFORMATION

WARNING: Installation and maintenance of this device should only be performed by qualified electricians. Failure to follow these instructions can result in serious injury or death.

- Always disconnect all power sources before installing or servicing the transfer switch.
- Ensure proper grounding of the device.
- Verify that the voltage and current ratings of the switch match your electrical system requirements.
- Do not operate the switch if it appears damaged.
- The coil operates normally at 85%-110% of the rated working voltage. Input voltage below this range may cause the coil to overheat and burn.

3. PRODUCT COMPONENTS AND DIMENSIONS



Figure 3.1: Front view of the NLQ1-63/4P Automatic Transfer Switch, showing the auto/manual selector and indicator lights.

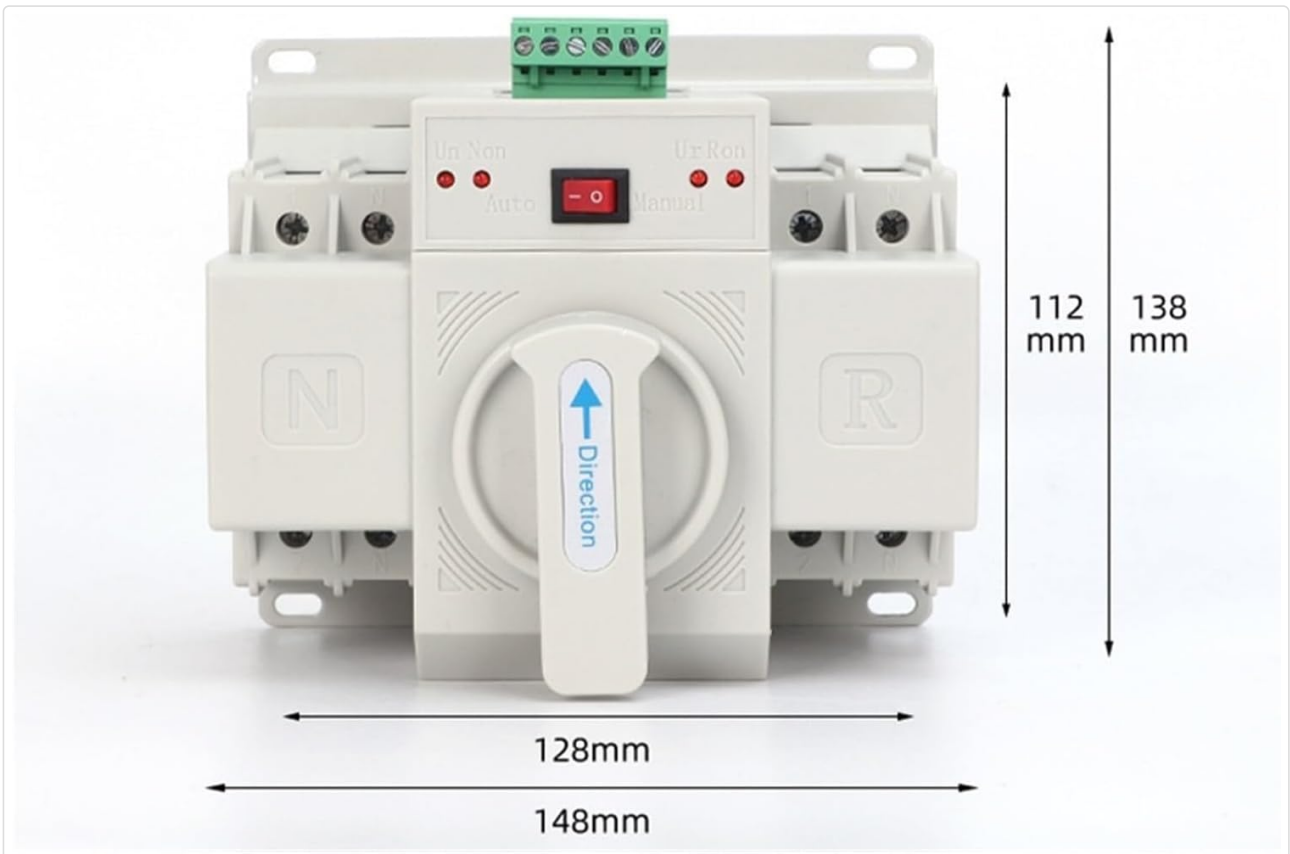


Figure 3.2: Front view of the transfer switch with overall dimensions: 148mm width, 138mm height, and 128mm mounting width.

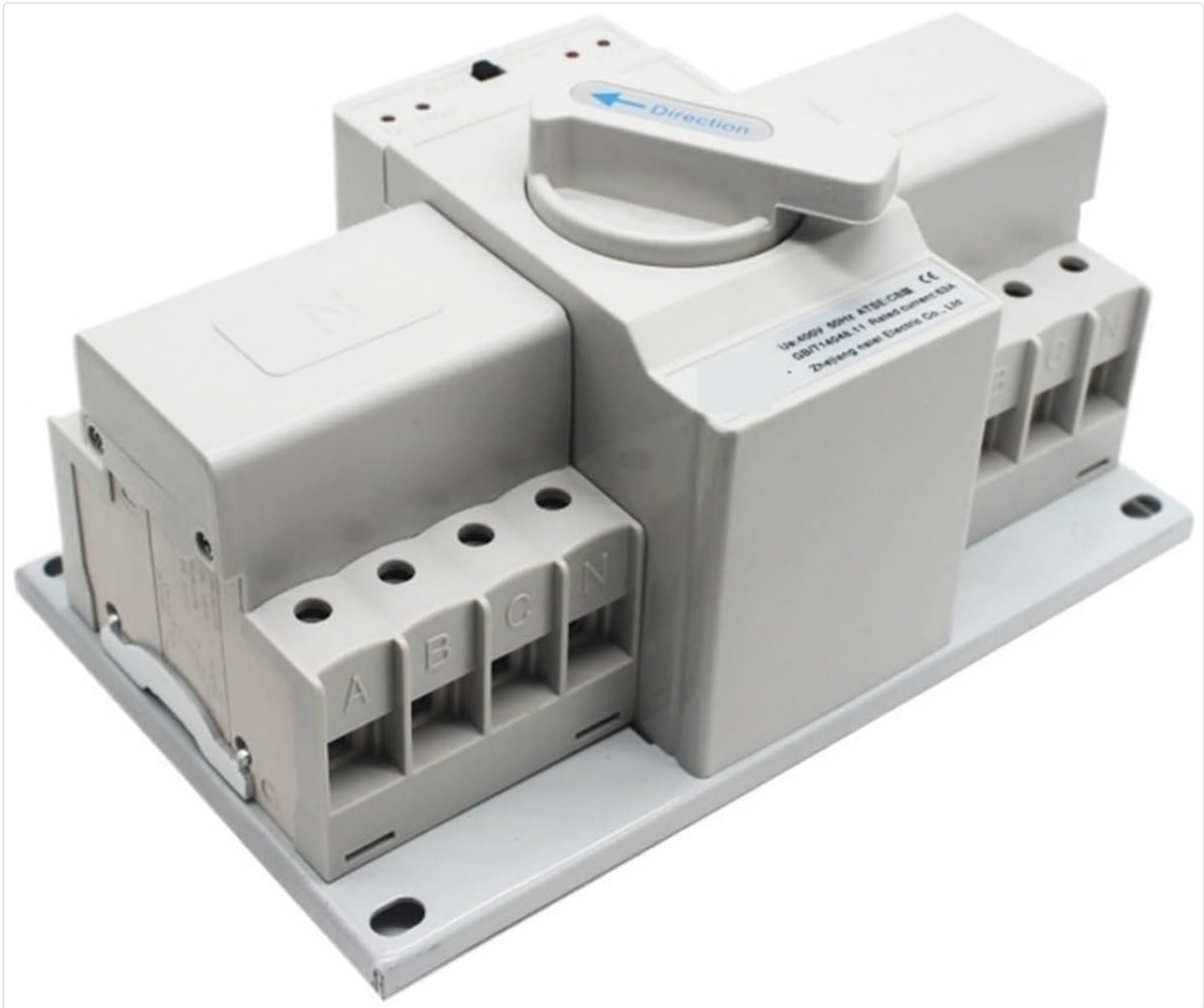


Figure 3.3: Angled view of the transfer switch, highlighting the screw terminals for power connections.

The transfer switch features clearly labeled input and output terminals, an auto/manual selector switch, and indicator lights for power status (Un Non, Ur Ron) and mode (Auto, Manual).

4. SETUP AND INSTALLATION

Installation of the Huayong NLQ1-63/4P ATS requires professional electrical knowledge. It is recommended to have a certified electrician perform the installation to ensure safety and compliance with local electrical codes.

4.1 Mounting

- Mount the transfer switch securely on a panel or within a Pz30 distribution box using appropriate fasteners. Refer to Figure 3.2 for mounting dimensions.
- Ensure adequate ventilation around the unit to prevent overheating.

4.2 Wiring Connections

1. Identify the primary (city) power input, backup power input, and load output terminals. These are typically labeled 'N' for Normal (primary) and 'R' for Reserve (backup) on the device.
2. Connect the primary power supply to the designated 'N' input terminals.
3. Connect the backup power supply (e.g., generator) to the designated 'R' input terminals.
4. Connect the electrical load (e.g., home circuit) to the output terminals.
5. Ensure all connections are tight and secure to prevent loose contacts and potential hazards.

6. Verify correct polarity and phase connections according to your electrical system.

5. OPERATING INSTRUCTIONS

The NLQ1-63/4P ATS supports both automatic and manual operation modes.

5.1 Automatic Mode

- Set the selector switch on the front panel to the 'Auto' position.
- In this mode, the switch will automatically monitor the primary (city) power supply.
- If the primary power supply becomes abnormal or fails, the ATS will detect this and automatically switch the load to the backup power supply within 50 milliseconds.
- Once the primary power supply is restored and stable, the ATS will automatically switch the load back to the primary power supply.
- Indicator lights (Un Non, Ur Ron) will illuminate to show which power source is currently active.

5.2 Manual Mode

- To manually switch between power sources, set the selector switch to the 'Manual' position.
- Use the central rotary handle (labeled 'Direction' with an arrow) to physically switch the power source. Rotate the handle to the desired position (Normal or Reserve) to connect the load to that power source.
- **Caution:** Ensure the backup power source is stable and ready before manually switching to it.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and reliable operation of your ATS. Always disconnect power before performing any maintenance.

- **Periodic Inspection:** Visually inspect the transfer switch and its connections annually for any signs of wear, damage, or loose wiring.
- **Cleaning:** Keep the unit clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Terminal Check:** Periodically check all screw terminals to ensure they remain tight.
- **Functional Test:** If safe to do so, periodically test the automatic transfer function by simulating a primary power outage (e.g., by temporarily disconnecting the primary power source, if your setup allows for safe testing).

7. TROUBLESHOOTING

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

- **No Power Transfer:**
 - Check if both primary and backup power sources are active and stable.
 - Ensure the ATS is in 'Auto' mode for automatic transfer.
 - Verify all wiring connections are secure.
- **Overheating Coil:**
 - Check the input voltage. Ensure it is within the 85%-110% range of the rated working voltage (380V/400V).
 - Ensure adequate ventilation around the unit.

• **Indicator Lights Not Functioning:**

- Verify power supply to the control circuit.
- Inspect for any visible damage to the lights or internal components.

If problems persist after troubleshooting, contact a qualified electrician or the manufacturer for assistance.

8. SPECIFICATIONS

Specification	Value
Model	NLQ1-63/4P (2P 125A)
Brand	Huayong
Operation Mode	Automatic / Manual
Operating Voltage	380V / 400V (AC)
Rated Current (Variant)	125A (for 2P variant)
Switching Time	Less than 50ms
Contact Type	Normally Open
Connector Type	Screw Terminals
Switch Type	Push Button (for mode selection)
Terminal Material	Copper, Silver
Mounting Type	Panel Mount
Control Method	Touch (for mode selection)
Item Weight	1800 Grams

9. WARRANTY AND SUPPORT

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