

ZipcOm MZQ2N-63

ZipcOm MZQ2N-63 Automatic Transfer Switch User Manual

Model: MZQ2N-63 | Brand: ZipcOm

1. INTRODUCTION

The ZipcOm MZQ2N-63 Automatic Transfer Switch (ATS) is engineered to provide a reliable and continuous power supply by automatically switching between a normal power source and a backup power source. This device is essential for critical power supply locations where uninterrupted operation is paramount. Its compact design and robust features ensure efficient power management.

Key features of the MZQ2N-63 include:

- **Flame-Retardant Plastic Material:** Constructed from high-quality flame-retardant plastic, ensuring good insulation, high temperature resistance, and enhanced safety.
- **Comprehensive Protection Functions:** Supports multiple protection features, including short circuit, overload, phase loss, and undervoltage protection, safeguarding your electrical system.
- **Enhanced Conductivity:** Utilizes silver contacts for both motion and static electricity, significantly improving conductivity and extending the product's service life.
- **Automatic and Manual Operation:** Offers seamless automatic switching and a manual override option for flexible control.

2. SAFETY INFORMATION

Please read and understand all safety instructions before installing, operating, or maintaining this Automatic Transfer Switch. Failure to follow these instructions may result in serious injury, death, or property damage.

- **Professional Installation Required:** Installation and wiring of this device must be performed by a qualified electrician in accordance with all local and national electrical codes.
- **Disconnect Power:** Always disconnect all power sources (normal and backup) before performing any installation, wiring, maintenance, or inspection. Verify that power is off using a voltage tester.
- **Electrical Hazard:** This device operates with high voltage. Contact with live components can cause electric shock.
- **Proper Grounding:** Ensure the device is properly grounded to prevent electrical hazards.
- **Environmental Conditions:** Do not expose the device to water, excessive moisture, or corrosive environments. Ensure adequate ventilation.
- **Use Correct Amperage:** Ensure the connected loads and power sources do not exceed the switch's rated amperage.

(63 Amps).

3. PRODUCT COMPONENTS

Familiarize yourself with the main components of the ZipcOm MZQ2N-63 Automatic Transfer Switch:

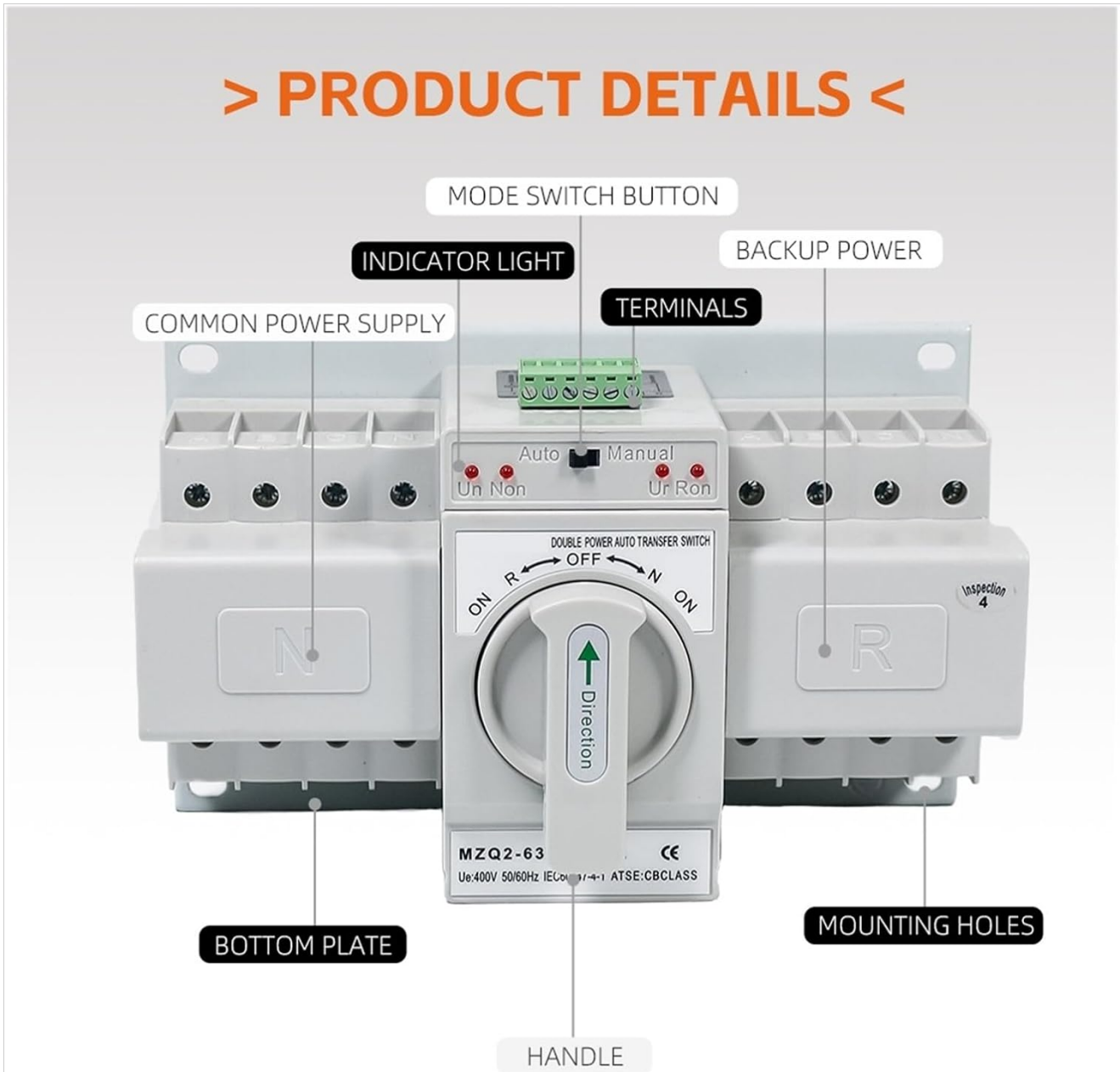


Figure 3.1: Front view of the MZQ2N-63 ATS with key components labeled. This image highlights the Mode Switch Button, Indicator Lights, Terminals for power connections, the main Handle for manual operation, and mounting points.

- **Mode Switch Button:** Allows selection between 'Auto' (automatic operation) and 'Manual' modes.
- **Indicator Lights:** Display the status of the power sources (e.g., 'Un Non' for Normal Power, 'Ur Ron' for Backup Power).
- **Terminals:** Connection points for Main Power, Backup Power, and Load.
- **Handle:** Used for manual switching between power sources when in 'Manual' mode.
- **Bottom Plate:** Provides structural support and mounting surface.
- **Mounting Holes:** For securing the ATS to a panel or surface.

4. INSTALLATION AND WIRING

Important: All installation and wiring procedures must be performed by a qualified electrician. Ensure all power sources are disconnected before proceeding.

4.1 Mounting

1. Select a suitable, dry, and well-ventilated location for mounting the ATS.
2. Use appropriate fasteners to secure the ATS to a stable surface via the mounting holes on the bottom plate.

4.2 Wiring Diagram

Refer to the wiring diagram below for proper connection of the main power, backup power, and load.

WIRING DIAGRAM

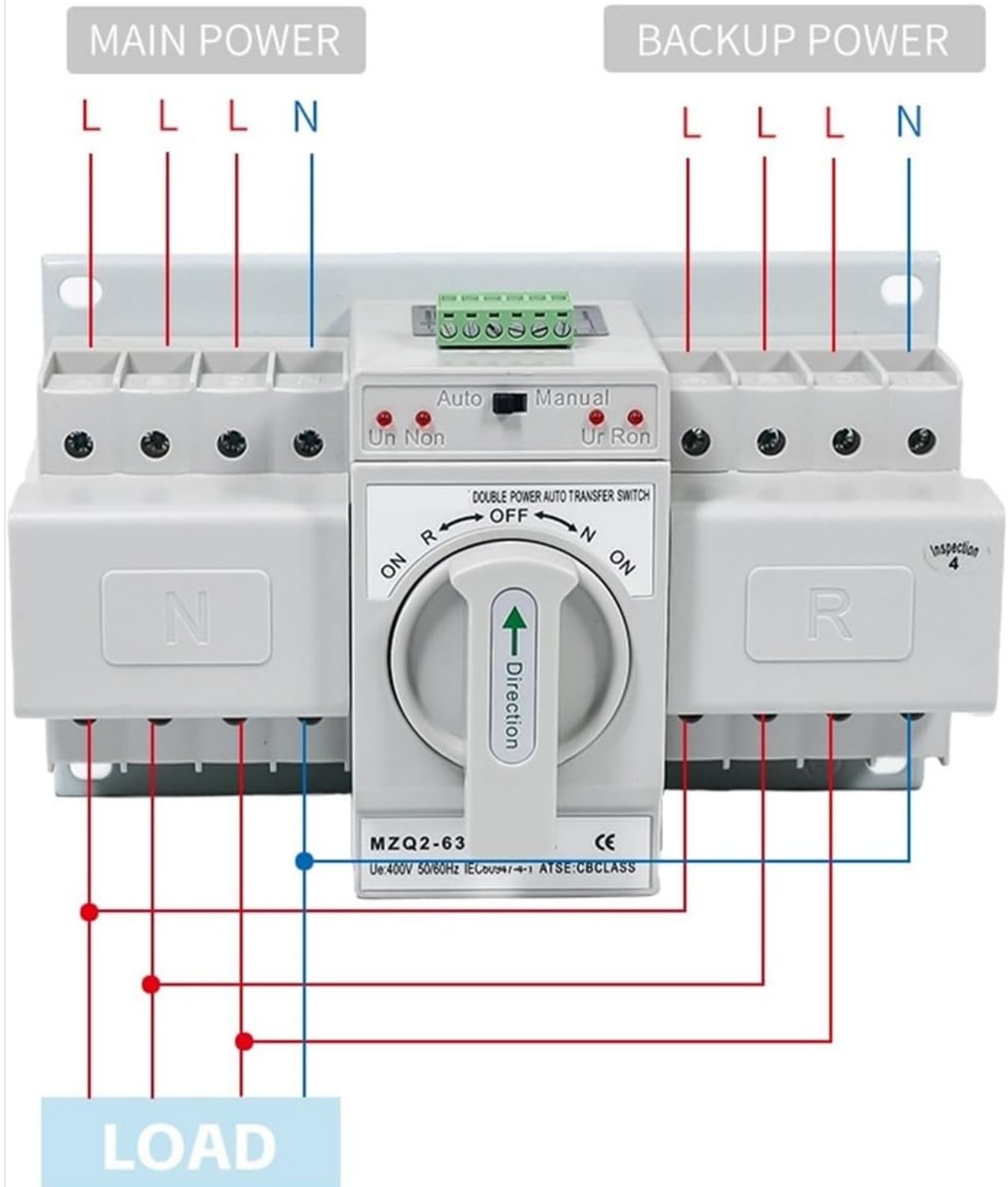


Figure 4.1: Wiring diagram illustrating the connections for Main Power (L1, L2, L3, N), Backup Power (L1, L2, L3, N), and the Load. Ensure all connections are secure and correctly phased.

4.3 Connection Steps

1. **Main Power Connection:** Connect the main power supply lines (L1, L2, L3, N) to the designated 'MAIN POWER' terminals on the ATS.
2. **Backup Power Connection:** Connect the backup power supply lines (L1, L2, L3, N) to the designated 'BACKUP POWER' terminals on the ATS.

POWER' terminals on the ATS.

3. **Load Connection:** Connect the load lines to the 'LOAD' terminals.
4. **Control Wiring:** Ensure any necessary control wiring (e.g., for remote indicators) is connected to the built-in standing open signal output port, if applicable.
5. **Verify Connections:** Double-check all wiring for correctness, tightness, and proper insulation before restoring power.

5. OPERATING INSTRUCTIONS

The ZipcOm MZQ2N-63 ATS offers both automatic and manual operation modes.

5.1 Automatic Mode

1. Set the Mode Switch Button to 'Auto'.
2. When the normal power supply is active, the ATS will connect the load to the normal power. The corresponding indicator light ('Un Non') will illuminate.
3. If the normal power supply becomes abnormal (e.g., power outage, undervoltage), the ATS will automatically switch the load to the backup power supply. The 'Ur Ron' indicator light will illuminate.
4. Once the normal power supply is restored and stable, the ATS will automatically switch the load back to the normal power supply.

5.2 Manual Mode

1. Set the Mode Switch Button to 'Manual'.
2. To switch between power sources, use the central handle. Rotate the handle to the desired position ('ON R' for Normal Power, 'ON N' for Backup Power).
3. **Caution:** In manual mode, the switch will not automatically transfer power. Ensure the desired power source is stable before manually switching.

6. MAINTENANCE

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

- **Periodic Inspection:** Visually inspect the ATS and its connections at least once a year for any signs of damage, loose wiring, or corrosion.
- **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 that all terminal screws are tight to prevent loose connections and overheating.
- **Functionality Test:** If safe to do so, periodically test the automatic transfer function by simulating a normal power outage (e.g., by temporarily disconnecting the normal power source).

7. TROUBLESHOOTING

If you encounter issues with your ZipcOm MZQ2N-63 ATS, refer to the following basic troubleshooting steps. For complex issues, contact a qualified electrician or customer support.

- **No Power to Load:**
 - Check if both normal and backup power sources are active.
 - Verify that the ATS is in 'Auto' mode or manually switched to an active source.
 - Inspect all wiring connections for looseness or damage.

- Check for tripped circuit breakers upstream of the ATS.
- **ATS Not Switching Automatically:**
 - Ensure the Mode Switch Button is set to 'Auto'.
 - Verify that the normal power source is indeed abnormal (e.g., voltage drop, outage) to trigger a transfer.
 - Check the indicator lights for status of both power sources.
- **Overload Protection Tripping:**
 - Reduce the total load connected to the ATS.
 - Ensure the total load does not exceed the 63 Amp rating of the switch.

8. TECHNICAL SPECIFICATIONS

Model	MZQ2N-63
Brand	ZipcOm
Operation Mode	Automatic
Rated Amperage	63 Amps
Rated Voltage	400V (Ue)
Rated Frequency	50/60Hz
Circuit Type	4-way (4 Pole)
Contact Material	Silver
Material	Flame-retardant Plastic, Silver
Mounting Type	Surface Mount
International Protection Rating	IP65
Item Weight	2.2 pounds

9. WARRANTY INFORMATION

Specific warranty terms and conditions for the ZipcOm MZQ2N-63 Automatic Transfer Switch are provided by the manufacturer or seller at the time of purchase. Please refer to your purchase documentation or contact the seller directly for detailed warranty information, including coverage period and claims process.

10. CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or inquiries regarding your ZipcOm MZQ2N-63 Automatic Transfer Switch, please contact your point of purchase or the manufacturer's customer support channels. Ensure you have your product model number (MZQ2N-63) and purchase details available when contacting support.