

Sonew NLQ3-125/2P

Sonew NLQ3-125/2P Dual Power Automatic Transfer Switch Instruction Manual

Model: NLQ3-125/2P | Brand: Sonew

1. INTRODUCTION

The Sonew NLQ3-125/2P Dual Power Automatic Transfer Switch (ATS) is designed to ensure a continuous power supply by automatically switching to a backup power source when the main power supply experiences abnormalities. This device offers both automatic and manual operation modes, providing safety and reliability with its millisecond switching speed. It is suitable for various applications where uninterrupted power is critical.

2. SAFETY INFORMATION

WARNING: Installation and maintenance should only be performed by qualified personnel. Always disconnect power before working on the device to prevent electric shock. Ensure all wiring complies with local electrical codes and regulations. Failure to follow these instructions may result in serious injury or property damage.

3. PRODUCT OVERVIEW

The Sonew NLQ3-125/2P ATS is constructed from flame-retardant PC material, offering excellent insulation and high-temperature resistance. It features silver contacts for enhanced conductivity and longevity. The design facilitates easy installation using a standard 35mm DIN rail method, making it suitable for PZ30 distribution boxes.



Figure 3.1: Front view of the Sonew NLQ3-125/2P Dual Power Automatic Transfer Switch.

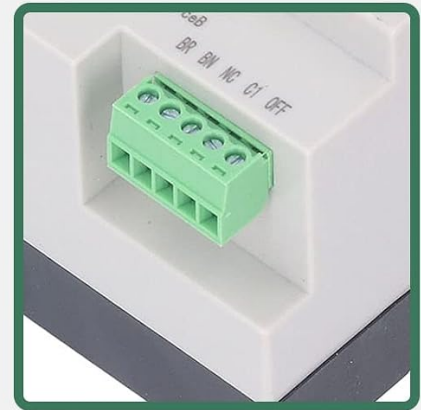


Industrial Silver Contacts

Dynamic and static contacts using silver contacts, greatly improving the use of the product life and conductivity

Purple Copper Terminals

Not easy to rust, strong electrical conductivity, durable



Guide Rail Installation

Fixed snap, easy to install, strong insulation, safe and flame retardant, can be used with confidence

Figure 3.2: Detailed view highlighting industrial silver contacts, purple copper terminals, and guide rail installation features.

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Video 3.1: An introductory video explaining the features and function of an Automatic Transfer Switch (ATS).

4. SETUP & INSTALLATION

Follow these steps for proper installation of your automatic transfer switch:

1. **Pre-installation Check:** Before installation, carefully inspect the integrity of the ATS unit. Use the operating handle to manually switch it on or off to check the flexibility of the transmission device. Verify the generation and disconnection conditions of both normal and backup power loads at each stage.
2. **Mounting:** The switch is designed for easy installation using the standard 35mm DIN rail method, typically within a PZ30 distribution box. Ensure the mounting is secure and stable.
3. **Wiring:** Wire the ATS according to the provided wiring diagram. Ensure all connections are tight and secure to prevent loose contacts and potential hazards.

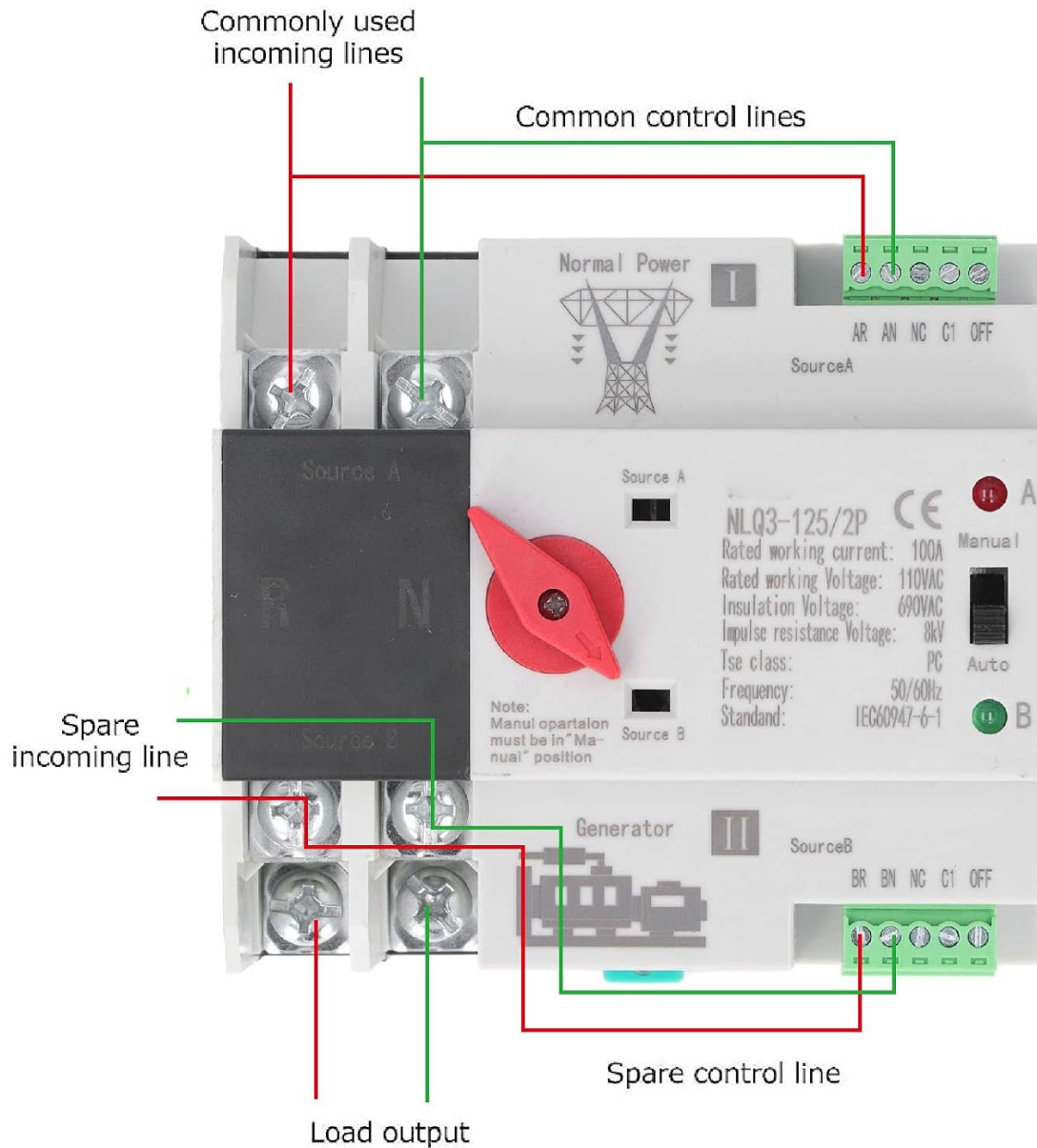


Figure 4.1: Wiring diagram for connecting the normal power, backup power, and load to the ATS.

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Video 4.1: A demonstration of the 2-pole Automatic Transfer Switch (ATS) in operation, showing its physical aspects and basic function.

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Video 4.2: A video demonstrating the wiring and basic functionality of a 110V 100A Dual Power Automatic Transfer Switch.

5. OPERATING INSTRUCTIONS

The NLQ3-125/2P ATS offers both automatic and manual operation modes to manage power transfer between your main and backup power sources.

5.1 Automatic Mode

In automatic mode, the switch continuously monitors the main power supply. If the main power fails or experiences an abnormality, the ATS will automatically switch the load to the backup power source within milliseconds. When the main power is restored, the switch will automatically transfer the load back to the main power supply.

5.2 Manual Mode

The device also allows for manual switching between power sources using the operating handle. This mode is useful for testing or specific maintenance scenarios. Ensure the switch is in the 'Manual' position before attempting to manually transfer power.

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Video 5.1: A video demonstrating the operation of the AC110V 100A Dual Power Automatic Transfer Switch.

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Video 5.2: A detailed video explaining the various operation modes of an Automatic Transfer Switch.

6. MAINTENANCE

To ensure optimal performance and longevity of your Sonew NLQ3-125/2P ATS, regular maintenance is recommended:

- Periodically inspect all wiring connections for tightness and signs of wear or corrosion.
- Keep the unit clean and free from dust and debris.
- Ensure proper ventilation around the unit to prevent overheating.
- Test the automatic transfer function periodically by simulating a main power failure (if safe to do so and with proper precautions).

7. TROUBLESHOOTING

If you encounter issues with your automatic transfer switch, consider the following:

- **No Power Transfer:** Check if both main and backup power sources are active. Verify all wiring connections are secure. Ensure the switch is in 'Auto' mode if automatic transfer is desired.
- **Intermittent Operation:** Inspect for loose connections or damaged wiring. Ensure the control voltage is stable and within the specified range.
- **Overheating:** Check for proper ventilation and ensure the unit is not overloaded beyond its rated current.

For persistent issues, please contact customer support or a qualified electrician.

8. SPECIFICATIONS

Feature	Specification
Model	NLQ3 125 2P (Soneweihtvx9158)
Rated Current (Ie)	100A
Insulation Voltage (Ui)	AC690V
Rated Voltage (Ue)	AC110V
Frequency	50/60Hz
Rated Impulse Withstand Voltage	8kV
Rated Short Circuit Current	50kA
Fuse	RT16 00 63A
Grade	PC Grade

Feature	Specification
Specification	2P
Service Life (Electrical)	2000 Times
Service Life (Mechanical)	5000 Times
Touch Time	<50ms
Operation Conversion Time	<50ms
Return Time	<50ms
Closing Time	<50ms
Material	Polycarbonate
Mounting Type	DIN Rail Mount

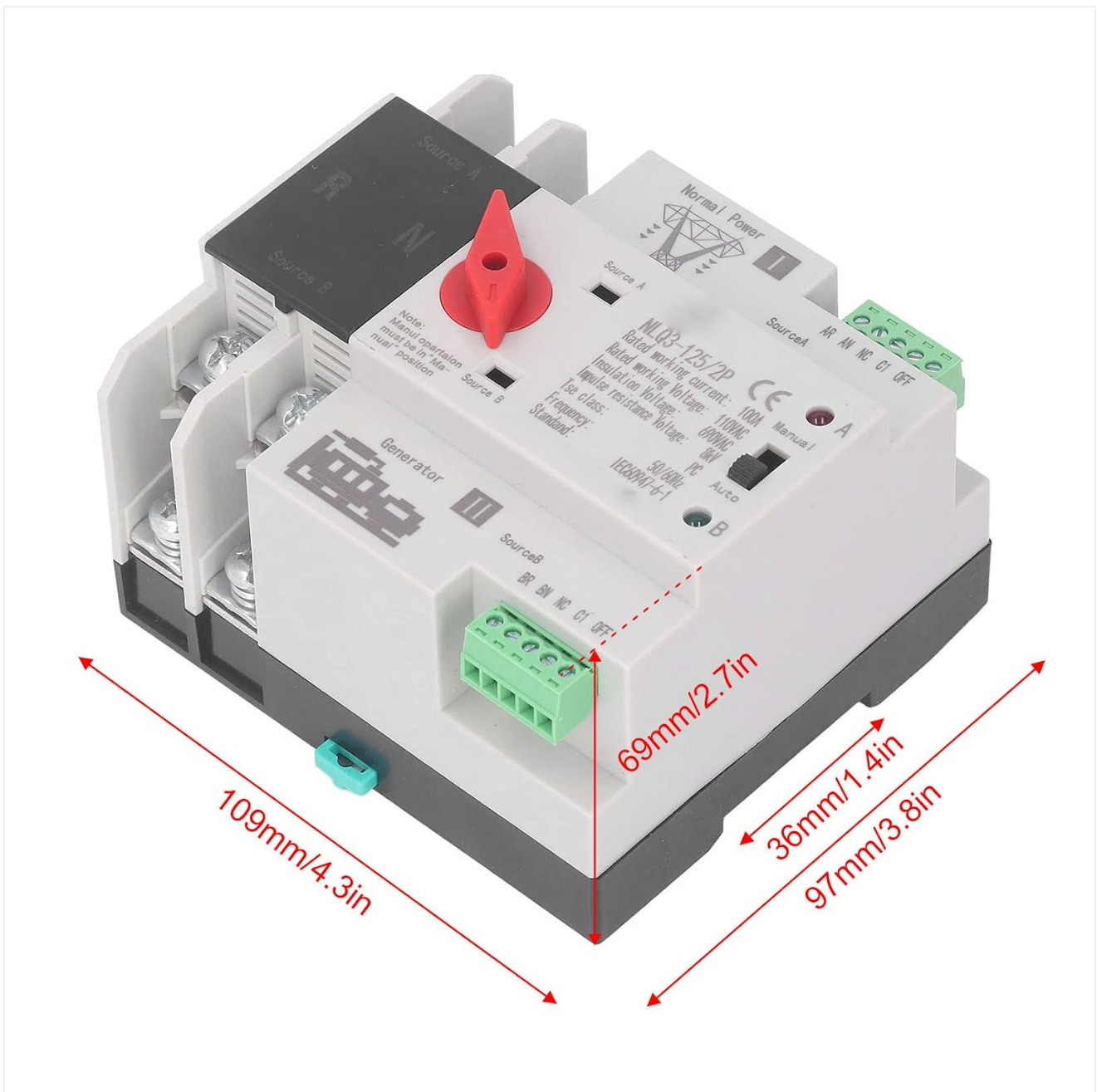


Figure 8.1: Product dimensions for installation planning.

Suitable for various scenarios



Bank office



Household electricity



Community elevator



Port terminal



Mechanical production



Fire Fighting

Figure 8.2: Examples of suitable application environments for the ATS.

9. WARRANTY & SUPPORT

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