PYKFVTGL NLQ7-125

PYKFVTGL NLQ7-125 Dual Power Automatic Transfer Switch

INSTRUCTION MANUAL

1. Product Overview

The PYKFVTGL NLQ7-125 Dual Power Automatic Transfer Switch (ATS) is designed to automatically switch between a main power supply (grid) and a reserve power supply (generator) to ensure continuous and reliable operation of electrical loads. This 2-pole, 80A switch is ideal for home generator applications, prioritizing the main power supply. It features a robust design with high-quality flame-retardant plastic material and silver contacts for enhanced conductivity and service life.

Figure 1: PYKFVTGL NLQ7-125 Dual Power Automatic Transfer Switch. This image shows the front view of the white, modular transfer switch with a green manual override lever and indicator lights for power sources I and II.

2. Important Safety Information

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

- Installation and maintenance must be performed by qualified electrical personnel only.
- Always disconnect all power sources before working on the switch or connected circuits.
- Ensure proper grounding of the system to prevent electrical shock.
- Do not operate the switch if it appears damaged or has been exposed to moisture.
- Verify all wiring connections are secure and correct according to local electrical codes.

3. Product Components

The NLQ7-125 ATS consists of several key components designed for reliable automatic power transfer:

- **Main Body:** Houses the switching mechanism and control circuitry.
- **Manual Override Lever:** A green lever located at the top for manual switching between power

sources I and II, or to the 'OFF' position.

- **Indicator Lights:** Typically red and green LEDs to indicate the active power source (I or II) and operational status.
- **Wiring Terminals:** Clearly marked terminals for connecting the main power input, reserve power input, and load output.
- **DIN Rail Mount:** Integrated design for easy installation onto a standard DIN rail.

4. Technical Specifications

Feature	Specification
Model	NLQ7-125
Rated Current (Le)	80A
Poles	2P
Frequency	50/60Hz
Installation Type	DIN Rail Mount
Material	Flame-retardant plastic, Silver contacts
Item Weight	2.2 pounds
Package Dimensions	0.39 x 0.39 x 0.39 inches

5. Installation Guide

The NLQ7-125 ATS is designed for easy installation on a standard DIN rail. Follow these steps carefully:

1. **Preparation:** Ensure all power to the installation area is disconnected at the main breaker. Verify with a voltage tester.
2. **Mounting:** Securely attach the ATS to a standard DIN rail within your electrical panel or enclosure.
3. **Wiring Main Power (Source I):** Connect the main power supply (grid) to the designated input terminals for Source I on the ATS. Ensure correct polarity (Line/Neutral) and secure connections.
4. **Wiring Reserve Power (Source II):** Connect the reserve power supply (generator) to the designated input terminals for Source II on the ATS. Ensure the generator is off during wiring.
5. **Wiring Load:** Connect the electrical loads (circuits you want to power) to the output terminals of the ATS.
6. **Verification:** Double-check all wiring connections for tightness and correctness. Ensure no bare wires are exposed.
7. **Enclosure:** Close and secure the protective cover of the electrical panel or enclosure.

6. Operating Instructions

The NLQ7-125 ATS operates automatically to manage your power sources. Understanding its working principle is key to proper operation:

- **Automatic Mode:** When the main power (Source I) is present, the ATS will automatically connect the loads to Source I. The corresponding indicator light will illuminate.

- **Automatic Transfer:** If the main power (Source I) fails or goes off, the ATS will detect this and, if the reserve power (Source II, e.g., generator) is active and providing power, it will automatically transfer the loads to Source II. The Source II indicator light will illuminate.
- **Return to Main Power:** When the main power (Source I) is restored, the ATS will automatically transfer the loads back to Source I, prioritizing the main grid supply.
- **Manual Override:** The green lever allows for manual switching. In case of an emergency or for testing, you can manually switch between Source I, Source II, or the 'OFF' position. Ensure the automatic function is disengaged before manual operation.

Note: *For the ATS to transfer to reserve power, the generator must be running and supplying power. If the generator is off, the ATS will not transfer to it.*

7. Maintenance

Regular maintenance ensures the longevity and reliable operation of your ATS:

- **Periodic Inspection:** Annually inspect the ATS for any signs of physical damage, loose connections, or overheating.
- **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 wiring terminals to ensure they remain tight and secure.
- **Functionality Test:** It is recommended to periodically test the automatic transfer function by simulating a main power outage (e.g., by temporarily shutting off the main breaker, if safe to do so and with proper precautions).

8. Troubleshooting

If you encounter issues with your NLQ7-125 ATS, refer to the following table:

Problem	Possible Cause	Solution
ATS does not transfer to reserve power when main power fails.	Generator is not running or not supplying power.	Ensure the generator is started and providing stable power to the ATS.
No power to loads from either source.	Both power sources are off; ATS is in 'OFF' position; loose wiring.	Check both main and reserve power sources. Verify ATS is not in 'OFF' mode. Inspect all wiring connections.
ATS does not return to main power when restored.	Main power not fully restored or detected; internal fault.	Confirm main power is stable. If issue persists, contact qualified personnel.
Indicator lights are off.	No power to the ATS; faulty indicator.	Check power supply to the ATS. If power is present, the indicator may be faulty.

For issues not listed above or if solutions do not resolve the problem, please contact a qualified electrician or customer support.

9. Warranty and Customer Support

This PYKFVTGL product is covered by a standard manufacturer's warranty against defects in materials

and workmanship. Please refer to your purchase documentation for specific warranty terms and duration.

For technical assistance, troubleshooting, or warranty claims, please contact your retailer or the manufacturer's customer support. Keep your purchase receipt and product model information handy when contacting support.