Kichler 15PL600AZT

Kichler 15PL600AZT Plus Series 600W Transformer Instruction Manual

Model: 15PL600AZT

1. Introduction

This manual provides comprehensive instructions for the safe installation, operation, and maintenance of your Kichler Plus Series 600W Transformer, model 15PL600AZT. Please read these instructions thoroughly before proceeding with installation or use to ensure proper function and safety.

The Kichler Plus Series Transformer is designed for low-voltage landscape lighting applications, providing reliable power with advanced protection features. This unit is rated for wet locations but is not approved for use with fixtures placed in ponds or landscape water features.

2. Safety Information

Important Safety Instructions:

- Always disconnect power at the circuit breaker before installing or servicing the transformer.
- This unit must be installed by a qualified electrician in accordance with national and local electrical codes.
- Do not immerse the transformer in water. It is rated for wet locations but not for submersion.
- Ensure all connections are secure and properly insulated to prevent electrical hazards.
- Do not exceed the maximum wattage rating of 600W for this transformer.
- If used indoors, the cable must be routed through conduit as per safety regulations.
- Check local laws and regulations regarding the installation and use of this product.

Warning: Risk of electric shock. Do not open the transformer housing unless specifically instructed by a qualified service technician.

3. Product Overview

The Kichler 15PL600AZT Plus Series Transformer is a robust unit designed for outdoor low-voltage lighting systems. It

features a powder-coated steel case for durability and a 6-foot cord for flexible placement.

Key Features:

- **Power Output:** 600 Watts.
- **Multi-Tap Connections:** Provides 12V, 13V, 14V, and 15V output options to compensate for voltage drop over longer wire runs.
- **Protection:** Equipped with an in-line magnetic breaker on the secondary side for short-circuit protection and an auto-resettable in-line primary overload protection. Features a thermal cut-off on the primary side.
- **Construction:** Powder-coated steel case with epoxy encapsulation for enhanced protection and performance.
- **Easy Connect Terminal Blocks:** Facilitates straightforward wiring.
- **Dimensions:** Approximately 6 inches (H) x 6.58 inches (W) x 18.95 inches (L).



Figure 1: Front view of the Kichler 15PL600AZT Plus Series 600W Transformer, showing the main housing and power cord connection.



Figure 2: Internal view of the Kichler 15PL600AZT Plus Series 600W Transformer, highlighting the terminal blocks, circuit breakers, and wiring connections.

4. Setup and Installation

Proper installation is critical for the safe and efficient operation of your transformer. Follow these steps carefully.

4.1 Pre-Installation Checklist:

- Verify that the total wattage of all connected fixtures does not exceed 600W.
- Ensure the installation location is suitable for wet locations but not prone to submersion.
- Gather necessary tools: wire strippers, screwdriver, mounting hardware (included), and appropriate wire connectors.
- Familiarize yourself with local electrical codes.

4.2 Mounting the Transformer:

1. Select a secure, vertical surface for mounting, such as a wall or post.
2. Use the included mounting plate and hardware to securely fasten the transformer to the chosen surface. Ensure it is level and stable.
3. Allow adequate ventilation around the transformer.

4.3 Wiring Connections:

1. **Disconnect Power:** Ensure the main power supply to the outlet where the transformer will be plugged in is turned off at the circuit breaker.

2. **Primary Connection:** Plug the transformer's 6-foot cord into a grounded 120V AC outlet.
3. **Secondary Connections (Low Voltage Output):**
    - Identify the appropriate voltage tap (12V, 13V, 14V, or 15V) based on your lighting design and wire run length. Higher voltage taps compensate for voltage drop.
    - Connect your low-voltage landscape lighting cables to the easy connect terminal blocks. Ensure positive and negative polarities are correctly matched.
    - Tighten all terminal screws securely.
4. **Grounding:** Ensure the transformer is properly grounded according to local codes.

Voltage Drop Calculation: To minimize voltage drop and maximize light output, keep wire runs as short as possible. Use the following equation to estimate voltage drop: A (length of wire) x B (total watts for all lamps on that run) = C (cable constant). Refer to the table below for cable constants:

Table 1: Cable Constants for Voltage Drop Calculation

Wire Gauge	Cable Constant	Max Watts / Max Feet (Approx.)
10 gauge	11920	(Higher capacity)
12 gauge	7500	250 watts / 200 feet
14 gauge	3500	200 watts / 150 feet
16 gauge	2200	150 watts / 100 feet
18 gauge	1380	(Lower capacity)

5. Operating Instructions

Once installed and wired, operating the Kichler 15PL600AZT transformer is straightforward.

5.1 Initial Power-Up:

1. After all wiring is complete and checked, turn on the power at the circuit breaker.
2. The transformer will power on, and connected low-voltage lights should illuminate.

5.2 Voltage Selection:

The transformer offers multiple voltage taps (12V, 13V, 14V, 15V). Select the tap that provides optimal brightness for your lighting fixtures, especially those farthest from the transformer, to counteract voltage drop. Adjusting the tap may require disconnecting power and re-wiring to a different terminal block.

6. Maintenance

The Kichler 15PL600AZT transformer is designed for minimal maintenance. However, periodic checks can ensure longevity and optimal performance.

- **Cleaning:** Periodically wipe the exterior of the transformer with a damp cloth to remove dirt and debris. Ensure power is disconnected before cleaning. Do not use abrasive cleaners or solvents.
- **Inspections:** Annually inspect all wiring connections for corrosion or damage. Ensure terminal screws remain tight. Check the power cord for any signs of wear or damage.

- **Ventilation:** Ensure that the transformer's ventilation openings are clear of obstructions to prevent overheating.

7. Troubleshooting

If you encounter issues with your Kichler transformer, refer to the following troubleshooting guide:

Table 2: Troubleshooting Guide

Problem	Possible Cause	Solution
Lights are not turning on.	No power to the transformer.	Check the circuit breaker and the outlet. Ensure the transformer is plugged in.
Lights are dim or flickering.	Voltage drop or overloaded circuit.	Check total wattage of connected lights. Use a higher voltage tap (13V, 14V, or 15V) if available. Shorten wire runs or use thicker gauge wire.
Transformer repeatedly trips.	Short circuit in the low-voltage wiring or overloaded circuit.	Inspect wiring for cuts or exposed conductors. Reduce the number of connected lights. Check for faulty bulbs.
No output from a specific tap.	Loose connection or internal fault.	Ensure wires are securely fastened to the terminal block. If problem persists, contact Kichler customer support.

If troubleshooting steps do not resolve the issue, contact Kichler customer support or a qualified electrician.

8. Specifications

Table 3: Product Specifications

Feature	Detail
Model Number	15PL600AZT
Wattage	600W
Input Voltage	120V AC
Output Voltage	12V, 13V, 14V, 15V (Multi-tap)
Current Rating	80 Amps (maximum per board)
Dimensions (H x W x L)	6 in x 6.58 in x 18.95 in (approx.)
Item Weight	28.3 Pounds
Material	Powder-coated Steel, Metal
Finish	Textured Architectural Bronze
Cord Length	6 feet
Certifications	UL rated for wet locations
Included Components	Mounting Hardware

Feature	Detail
UPC	783927123525

9. Warranty Information

The Kichler 15PL600AZT Plus Series Transformer comes with a**10-year limited warranty**. This warranty covers defects in materials and workmanship under normal use. For specific terms and conditions, or to make a warranty claim, please refer to the official Kichler warranty documentation or contact Kichler customer support.

10. Customer Support

For further assistance, technical support, or inquiries regarding your Kichler 15PL600AZT Transformer, please contact Kichler customer service through their official website or the contact information provided with your product packaging.

You can also visit the official Kichler website for additional resources and product information:www.kichler.com

© 2023 Kichler Lighting. All rights reserved.

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