

Beckhoff KL2622

Beckhoff KL2622 Relay Output Terminal: 2-Channel, 2A, 230VAC User Manual

Model: KL2622

1. INTRODUCTION

This user manual provides essential information for the safe and efficient installation, operation, and maintenance of the Beckhoff KL2622 Relay Output Terminal. The KL2622 is a 2-channel digital output terminal designed for industrial control applications, providing two independent relay outputs capable of switching up to 2 Amps at 230 V AC/DC.

Please read this manual thoroughly before commencing any work with the device to ensure proper handling and to prevent potential hazards or damage.

2. SAFETY INSTRUCTIONS

- Installation and commissioning must only be carried out by qualified personnel familiar with electrical engineering and the relevant safety regulations.
- Disconnect power from the system before performing any installation, wiring, or maintenance work.
- Ensure that the operating voltage and current ratings of the KL2622 are not exceeded.
- Protect the device from moisture, dust, and extreme temperatures.
- Do not open the housing of the terminal. There are no user-serviceable parts inside.
- Proper grounding must be ensured for all connected components.

3. PRODUCT OVERVIEW

The Beckhoff KL2622 is a Bus Terminal that provides two relay outputs. It is designed for direct connection to a bus coupler or other Bus Terminals within a Beckhoff Bus Terminal system. Each output features an LED indicator for status visualization.

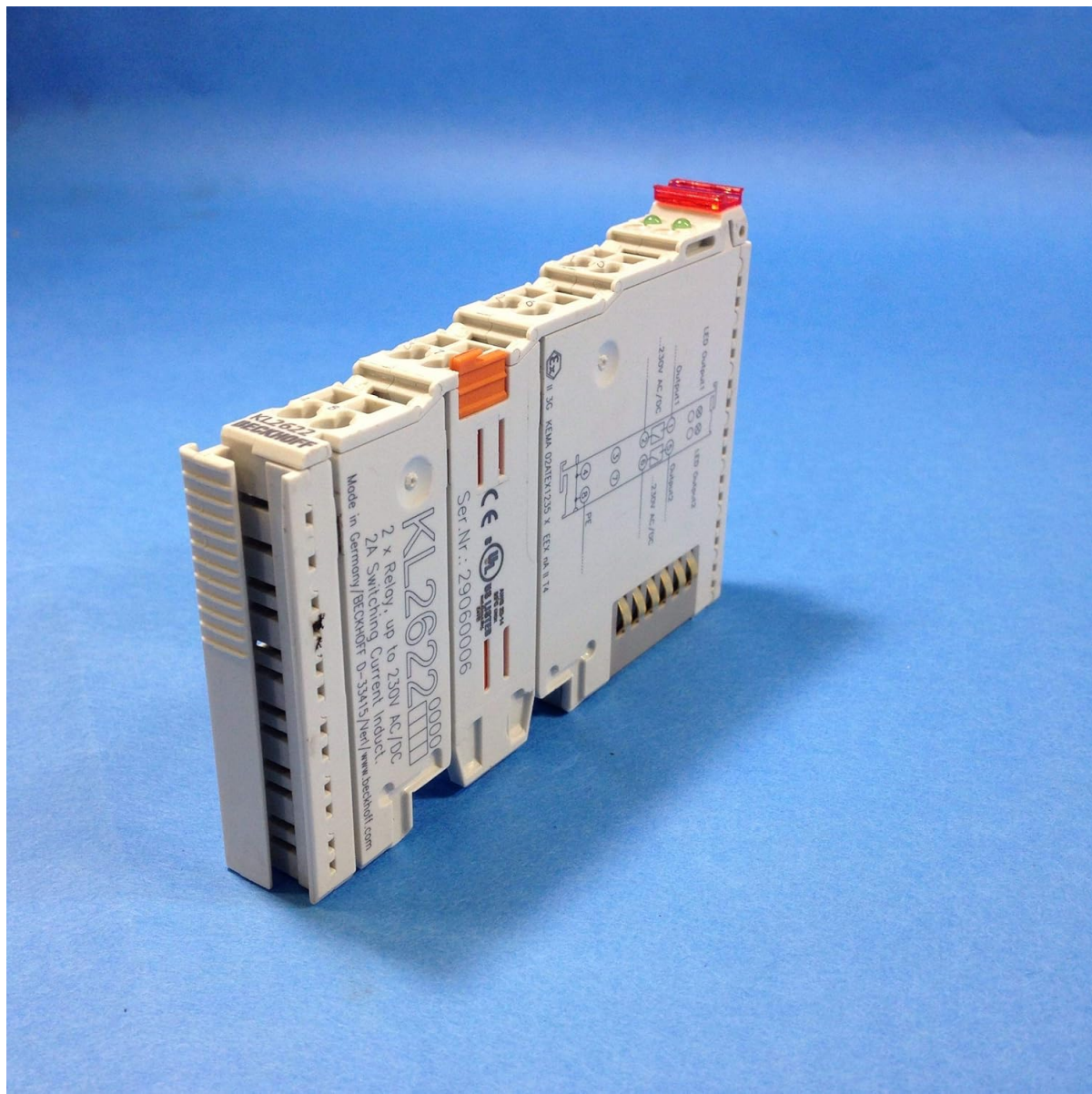


Figure 3.1: Angled view of the Beckhoff KL2622 Relay Output Terminal. This image shows the overall form factor, the terminal block connections, and the product labeling on the side.

The terminal features a compact design for DIN rail mounting and integrates seamlessly into existing Beckhoff I/O systems. The wiring diagram and specific product information are printed directly on the device housing for quick reference.

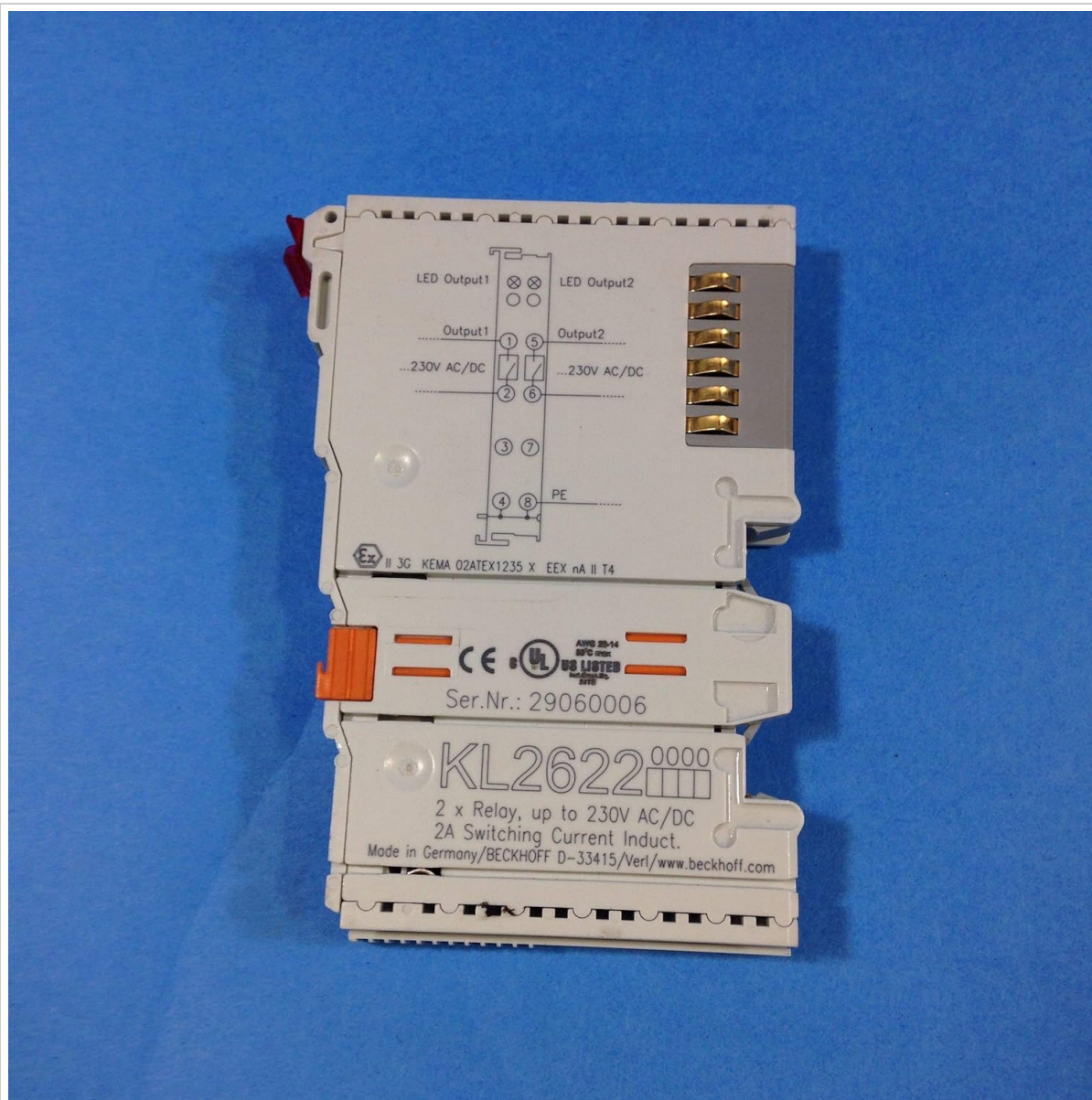


Figure 3.2: Top view of the KL2622, highlighting the integrated wiring diagram for Output 1 and Output 2, along with the power supply connections and protective earth (PE). The product model number and serial number are also visible.

4. SPECIFICATIONS

Parameter	Value
Model	KL2622
Number of Channels	2
Output Type	Relay Output
Switching Current	Up to 2 A per channel
Switching Voltage	Up to 230 V AC/DC
Wiring	4-wire connection (for power and outputs)
Manufacturer	Beckhoff
Product Dimensions	Approximately 3 x 4 x 1 inches (7.6 x 10.2 x 2.5 cm)

Parameter	Value
Weight	Approximately 1.51 Pounds (0.68 kg)

5. SETUP AND INSTALLATION

5.1 Mounting

The KL2622 terminal is designed for mounting on a standard 35 mm DIN rail. It should be snapped onto the DIN rail alongside a bus coupler and other Bus Terminals, ensuring proper mechanical and electrical connection.

5.2 Wiring

Before wiring, ensure all power supplies are disconnected. The KL2622 features screwless terminals for quick and secure wiring. Refer to the diagram printed on the terminal and Figure 5.1 for connection details.

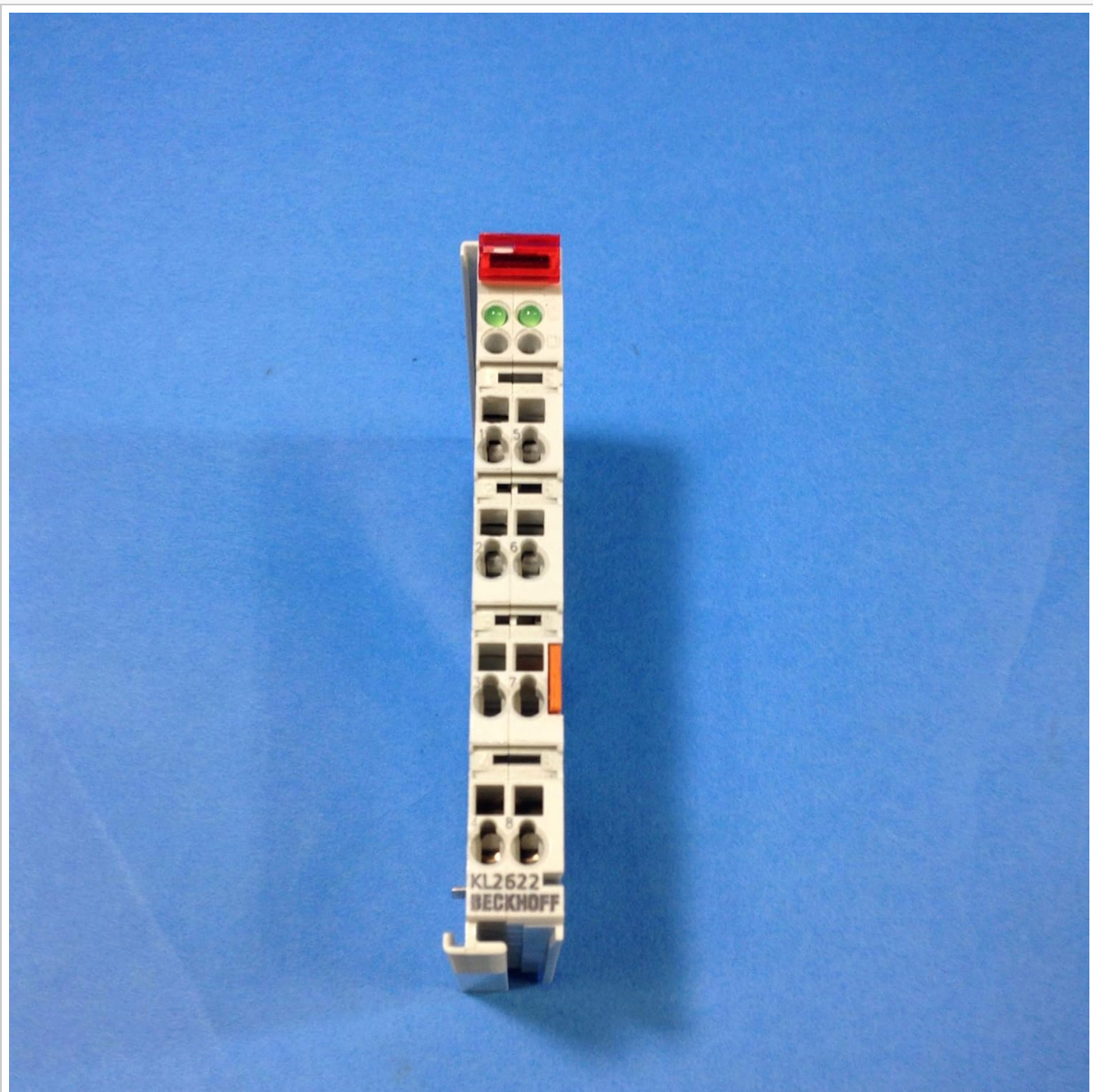


Figure 5.1: Side view of the KL2622, illustrating the terminal block connections. Wires are inserted into the openings and secured by pressing down the orange tab.

1. **Power Supply:** Connect the 230 V AC/DC power supply to the designated terminals. Ensure correct polarity if using DC.

2. **Output 1:** Connect the load for Output 1 to the corresponding terminals.
3. **Output 2:** Connect the load for Output 2 to the corresponding terminals.
4. **Protective Earth (PE):** Ensure the protective earth connection is properly made to the PE terminal, if applicable to your system.

The terminal supports 4-wire connections, meaning separate connections for the power supply and each output, allowing for independent control and isolation.

6. OPERATION

Once installed and wired correctly, the KL2622 operates under the control of the connected bus coupler and the higher-level control system (e.g., PLC). The relay outputs are switched based on the digital commands received from the control system.

6.1 LED Indicators

Each output channel on the KL2622 is equipped with an LED indicator:

- **LED ON:** Indicates that the corresponding relay output is active (closed).
- **LED OFF:** Indicates that the corresponding relay output is inactive (open).

These LEDs provide a visual confirmation of the output status, aiding in commissioning and troubleshooting.

7. MAINTENANCE

The Beckhoff KL2622 is designed for maintenance-free operation. However, periodic inspection of the wiring connections and the terminal's physical condition is recommended to ensure continued reliable performance.

- **Cleaning:** If necessary, clean the exterior of the terminal with a soft, dry, lint-free cloth. Do not use abrasive cleaners or solvents.
- **Connection Check:** Periodically verify that all wire connections are secure and free from corrosion.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges.

No internal maintenance or user-serviceable parts are present. Any repairs should be handled by authorized Beckhoff service personnel.

8. TROUBLESHOOTING

This section addresses common issues that may arise during the operation of the KL2622 terminal.

Problem	Possible Cause	Solution
Output LED does not illuminate.	<ul style="list-style-type: none">◦ No power supply to the terminal.◦ No control signal from the bus coupler.◦ Faulty LED or internal component.	<ul style="list-style-type: none">◦ Check power supply connections and voltage.◦ Verify the control program and bus communication.◦ Replace the terminal if other checks fail.

Problem	Possible Cause	Solution
Connected load does not switch.	<ul style="list-style-type: none"> Incorrect wiring of the load. Load current/voltage exceeds specifications. Damaged relay contact. 	<ul style="list-style-type: none"> Inspect load wiring according to Figure 3.2. Ensure load parameters are within 2A, 230V AC/DC. If LED is on but load doesn't switch, the relay may be faulty; replace the terminal.
Terminal not recognized by bus coupler.	<ul style="list-style-type: none"> Improper seating on DIN rail. Damaged contacts between terminals. 	<ul style="list-style-type: none"> Re-seat the terminal firmly on the DIN rail. Inspect the side contacts for damage.

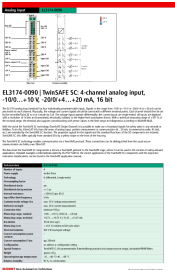

9. WARRANTY AND SUPPORT





Beckhoff Automation GmbH & Co. KG provides a standard warranty for its products. For specific warranty terms and conditions, please refer to the official Beckhoff website or contact your local Beckhoff sales and support representative.

For technical support, product inquiries, or service requests, please visit the official Beckhoff website at www.beckhoff.com or contact their customer service department.

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Related Documents - KL2622

	<p>Beckhoff EL3174-0090 TwinSAFE SC 4-Channel Analog Input Terminal</p> <p>Datasheet for the Beckhoff EL3174-0090 TwinSAFE SC, a 4-channel analog input terminal supporting -10/0...+10 V and -20/0/+4...+20 mA signals with 16-bit resolution. Details technical specifications, features, and related products for industrial automation.</p>
	<p>EL6751 Master/Slave-Klemme für CANopen - Beckhoff Technische Dokumentation</p> <p>Umfassende technische Dokumentation für die Beckhoff EL6751 Master/Slave-Klemme für CANopen. Erfahren Sie mehr über Installation, Konfiguration, CANopen-Kommunikation und Fehlerbehebung für industrielle Automatisierungslösungen.</p>

 <p>BECKHOFF New Automation Technology</p> <p>TF50x0 TwinCAT 3 NC PTP</p>	<p>Beckhoff TwinCAT 3 NC PTP TF50x0 Manual: Motion Control Configuration and Parameters</p> <p>Beckhoff's TwinCAT 3 NC PTP (TF50x0) manual detailing motion control configuration, setup, and parameters for industrial automation. Covers quick start, axis configuration, motion parameters, PLC integration, and technical specifications.</p>
 <p>BECKHOFF</p> <p>CB4055 Manual</p>	<p>Beckhoff CB4055 Industrial Motherboard Manual</p> <p>Detailed manual for the Beckhoff CB4055 industrial motherboard, covering features, specifications, connectors, BIOS settings, and technical data for control and automation engineering specialists.</p>
 <p>BECKHOFF New Automation Technology</p> <p>Service Tool BST Beckhoff Service Tool</p>	<p>Beckhoff Service Tool (BST) Manual - Backup and Recovery for Industrial PCs</p> <p>Comprehensive guide to using the Beckhoff Service Tool (BST) for creating, restoring, and managing system images on Industrial PCs. Covers installation, configuration, remote access, and support.</p>
 <p>BECKHOFF New Automation Technology</p> <p>EL6695 EtherCAT Bridge Terminal</p>	<p>Beckhoff EL6695 EtherCAT Bridge Terminal - Technical Documentation</p> <p>Comprehensive technical documentation for the Beckhoff EL6695 EtherCAT Bridge Terminal, covering installation, configuration, communication protocols, and operating modes for industrial automation.</p>