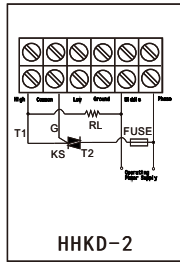


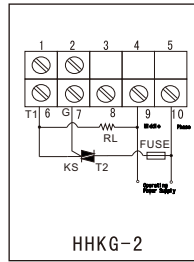
- (5) If an ammeter is connected, it must be connected in series at the second anode (T2) of the triac. Ensure that the trigger signal does not pass through the ammeter.
- (6) The trigger signal wires from the meter to each phase of the triac should be as short as possible and routed separately from other wires to avoid mutual interference that could cause the triac to trigger out of control.

VI. Terminal Wiring Instructions

(The actual wiring shall be subject to the wiring diagram attached to the meter housing and the pin positions of the triac.)



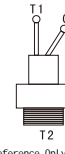
HHKD-2



HHKG-2



Triac Pinout Diagram (For Reference Only)



Note: Phase refers to the live wire, Middle refers to the neutral wire, and KS is the bidirectional triac. The meter output is connected to the G/T1 terminals of the triac. FUSE is the Fuse, and RL is the load. The meter can drive bidirectional triacs with a current range of 0-50A. The triac must be a bidirectional type, and the meter's power supply must share the same voltage as the load's power supply.

VII. Usage Precautions

- The output of the intelligent voltage regulator is controlled by the touch switch " P ", which acts as a temporary power switch when the meter is in standby mode.
- Use the increment key " ▲ " or decrement key " ▼ " on the adjustment panel to change the Set Value (SV) as required, so that the Actual Control Voltage Value (PV, i.e., the voltage across the load) will reach the desired value accordingly.
- During the operation of the meter, if the upper display value (PV) flashes, please check whether the triac is damaged or broken down, or whether the load wiring has an open circuit.
- Do not drive inductive loads such as induction furnaces and step-down transformers, as this may damage the triac and the meter.
- If the triac fails to fully conduct or the output jitters severely, you can swap the trigger signal output wirings of the corresponding phase with each other.

③

- Due to the different types of SCR thyristors selected by users, they are generally divided into bidirectional triacs and thyristor modules. Therefore, you must specify the type and pay attention to wiring when placing an order. The wiring diagram marked on the meter housing shall prevail.
- When storing the meter, it should be placed in a dry, ventilated area free of corrosive gases, and the ambient temperature and relative humidity must meet the technical requirements.
- If the meter fails due to manufacturing defects within one year from the date of shipment, when it is used and stored under the specified conditions, the manufacturer shall be responsible for repair.



C-Lin

欣灵电气股份有限公司
XINLING ELECTRICAL CO., LTD.

Address: No. 228, 19th Wei Road, Yueqing Economic Development Zone,
Zhejiang Province
Tel: 0577-6272 9555
Fax: 0577-6272 2963
Official Website: www.xinling.cn
E-mail: xl@xinling.com
Technical Support: 400-836-775





欣灵

使用说明书
Products Instructions

HHK□-2 Series

Intelligent Thyristor Voltage Regulator

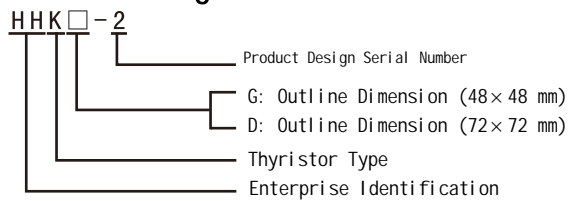
Thank you for using C-Lin Instruments and meters.
Please read the instruction manual before operating
the product!

09A01301

I. Overview

The HHK-2 Intelligent Thyristor Voltage Regulator (hereinafter referred to as the "instrument") is used in conjunction with thyristors to adjust the voltage across the load. The instrument employs a phase-shift triggering method for thyristors, altering the effective value of each power waveform on the load, and regulates heating power through continuous, gradual voltage adjustment. Thanks to deep voltage negative feedback, it delivers excellent adjustment linearity, minimizes the impact of grid fluctuations, and allows ordinary ammeters to be used for load current and voltage detection. Featuring an innovative design with a dual-screen, dual-color LED display, this regulator offers unique advantages over traditional pointer regulators: high precision, strong shock resistance, reliable performance, excellent anti-interference capability, compact size, light weight, clear readings, zero parallax, and remote observability. The HHK-2 Intelligent Thyristor Voltage Regulator adopts an internationally advanced dedicated control microprocessor, ensuring superior control performance and high cost-effectiveness. It is widely used in blow molding, vacuum forming, mold heating, packaging machinery, and other equipment.

II. Model Naming Rules

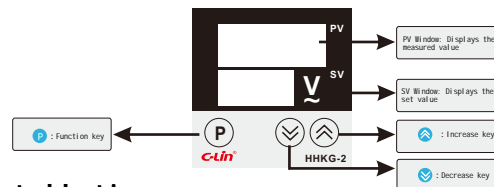


III. Main Technical Specifications

1. Output Pulse: Amplitude ≥ 3 V, pulse width ≥ 50 μ s (measured with a 20 Ω load).
2. Maximum Conducting Angle of Phase-Shift Trigger: $\geq 150^\circ$.
3. Voltage Setting Range: 0~200 V (or specified range).
4. Operating Environment: Ambient temperature 0~50°C, relative humidity $\leq 85\%$, in a non-corrosive gas atmosphere.
5. Operating Power Supply: AC 220V $\pm 15\%$, 50 Hz, power consumption ≤ 2 VA.

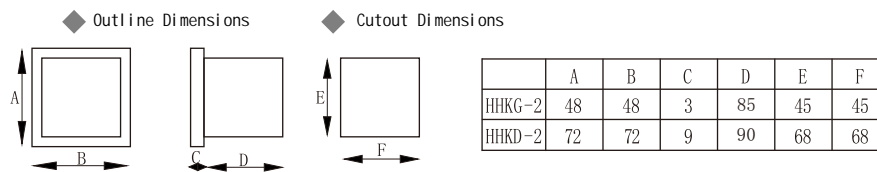
①

IV. Panel Names and Function Descriptions



V. Installation

1. Installation Dimensions



2. Installation Instructions

- (1) Connect the output, power supply, and electric furnace load in accordance with the wiring diagram.
- (2) The voltage withstand rating of the thyristor must be ≥ 600 V, and its rated current must be \geq twice the actual operating current. The thyristor must be equipped with a sufficiently large heat sink, and ensure adequate ventilation and heat dissipation to keep the thyristor temperature $\leq 70^\circ\text{C}$ under all conditions.
- (3) The fuse connected in series with the thyristor's second anode (T2) must be installed at the phase line input terminal, and not at any other position.
- (4) If the thyristor heat sink is live, full consideration must be given to preventing electric shock and mutual short-circuiting between thyristors during installation.

②