MyncbD 12K 33ohm/m Carbon Fiber Heating Cable with M3HGB-H-WIFI Thermostat

MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable with M3HGB-H-WIFI Thermostat User Manual

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable with M3HGB-H-WIFI Thermostat. Please read this manual thoroughly before use to ensure safe and efficient operation.

Technical Specifications

Specification	Value
Product Name	Carbon Fiber Heating Wire
Insulating Material	Silicone Rubber
Maximum Withstand Temperature	200 °C (degrees Celsius)
Heating Temperature	Based on usage length
Heating Conductor	12K Carbon Fiber
Leakage Current	0.05mA/m
Maximum Power Supported	25W/M
Diameter	3 ± 0.1 mm (thicker and safer)
Color	Red
Infrared Wavelength	8UM-18UM
Conductor Resistance	33 ± 10% Ohm/m
Package Includes	100m Cable + 20 Copper Tubes + 20 Sleeves

Installation Suggestions

Due to the characteristics of carbon fiber heating cable, it is not recommended for use over a single very long length. For floor heating applications, we suggest using sections of approximately 10 meters per area and connecting all these sections in parallel to the power source. Maintain a consistent distance of 8 to 12 cm between parallel cable runs for even heat distribution.

Image: The MyncbD 12K 33ohm/m Carbon Fiber Infrared Heating Cable, M3HGB-H-WIFI Thermostat, copper tubes, and heat shrink sleeves included in the package.

Image: A coil of the 12K 33ohm/m carbon fiber heating cable, along with a bag containing copper crimp tubes and heat shrink sleeves for making electrical connections.

Heating Cable Connection

To connect the heating cable, strip the insulation from the ends of the carbon fiber wire. Insert the exposed carbon fiber filaments into the copper tubes, then crimp the tubes securely. Cover the crimped connections with the provided heat shrink sleeves and apply heat to seal them, ensuring a secure and insulated connection. These connections will then be wired to your thermostat or power supply.

Image: A close-up view of the end of the carbon fiber heating cable, with the silicone insulation stripped back to reveal the black carbon fiber filaments.

Operating Instructions

Power Calculation

The electric power (in Watts) of the heating cable can be calculated using the following formula:

Power = (Voltage × Voltage) ÷ Resistance

For the 12K carbon fiber heating cable, the resistance is approximately 33 Ohm/meter.

- **Example 1:** Using 10 meters of 12K carbon fiber cable at 220V:
  - Power = (220V × 220V) ÷ (10 meters × 33 Ohm/meter) = 48400 ÷ 330 = 146.67W (approximately 150W)
- **Example 2:** Using 15 meters of 12K carbon fiber cable at 220V:
  - Power = (220V × 220V) ÷ (15 meters × 33 Ohm/meter) = 48400 ÷ 495 = 97.78W (approximately 100W)

Note: The longer the cable length used in a single circuit, the higher the total resistance, which results in lower overall power output and a lower heating temperature for that section.

Image: A coil of the 12K 33ohm/m carbon fiber heating cable, highlighting its resistance specification.

Image: A close-up of the red silicone-insulated carbon fiber heating cable, demonstrating its flexibility and durable construction.

Maintenance

The MyncbD carbon fiber heating cable is designed for long-term, maintenance-free operation once properly installed. Regular inspection of visible components (if any) for damage or wear is recommended. Ensure all electrical connections remain secure and free from moisture. Do not attempt to repair damaged cable sections; replace them if necessary.

Troubleshooting (Questions & Answers)

Q1: What does "12K" mean? And what is the difference between 12K and 24K?

A1: The 'K' stands for thousand. So, 12K means 12 thousand. This indicates that the conductor of the 12K carbon fiber heating cable is composed of 12,000 carbon fiber filaments, with a resistance of 33 Ohm/m. The conductor of the 24K cable is composed of 24,000 carbon fiber filaments, with a resistance of 17 Ohm/m. A lower 'K' value generally means higher resistance per meter, and a higher 'K' value means lower resistance per meter.

Q2: What is the difference between a rubber sheath and a Teflon sheath?

A2: (Information regarding the difference between rubber and Teflon sheaths is not provided in the product description. Please refer to general electrical material specifications or contact customer support for details.)

Warranty Information

Please refer to the product packaging or your purchase documentation for specific warranty terms and conditions. Generally, products are covered against manufacturing defects for a limited period from the date of purchase. Keep your proof of purchase for warranty claims.

Customer Support

For technical assistance, troubleshooting not covered in this manual, or warranty inquiries, please contact your retailer or the manufacturer directly. Refer to the contact information provided with your product or on the MyncbD official website.