

Elitech MTC-5060

Elitech MTC-5060 Universal Refrigerator Thermostat

Instruction Manual

1. INTRODUCTION

The Elitech MTC-5060 is a universal temperature controller designed for refrigeration and defrosting applications. It features a dual-output control for cooling and defrosting, dual temperature sensors for storage and defrosting, and a clear dual-display panel. This manual provides essential information for the safe installation, operation, and maintenance of your MTC-5060 thermostat.



Image 1.1: Elitech MTC-5060 thermostat in a cold storage setting, illustrating its intended use in refrigeration systems.

2. SAFETY INFORMATION

- Ensure all wiring is performed by a qualified electrician in accordance with local electrical codes.
- Disconnect power before installation, wiring, or maintenance to prevent electric shock.
- Do not operate the device in environments with excessive moisture, dust, or corrosive gases.
- Verify the power supply voltage (110V) matches the device's requirements.
- The device has passed four-level industrial EMC tests, ensuring stable and reliable operation in harsh environments.

3. PRODUCT OVERVIEW

3.1 Key Features

- **High Precision:** Features a high-precision sensor and chip, capable of withstanding 3000 high and low-temperature shocks, ensuring minimal drift and stable performance.
- **Easy Operation:** Multifunctional button panel allows common functions to be operated with a single button, enabling configuration without entering complex menus.
- **Clear Display:** Large panel with dual temperature display intuitively shows current and set temperatures.
- **Dual Functionality:** Provides cooling and defrosting dual output control.
- **Dual Sensors:** Equipped with dual sensors for accurate storage and defrosting temperature monitoring.

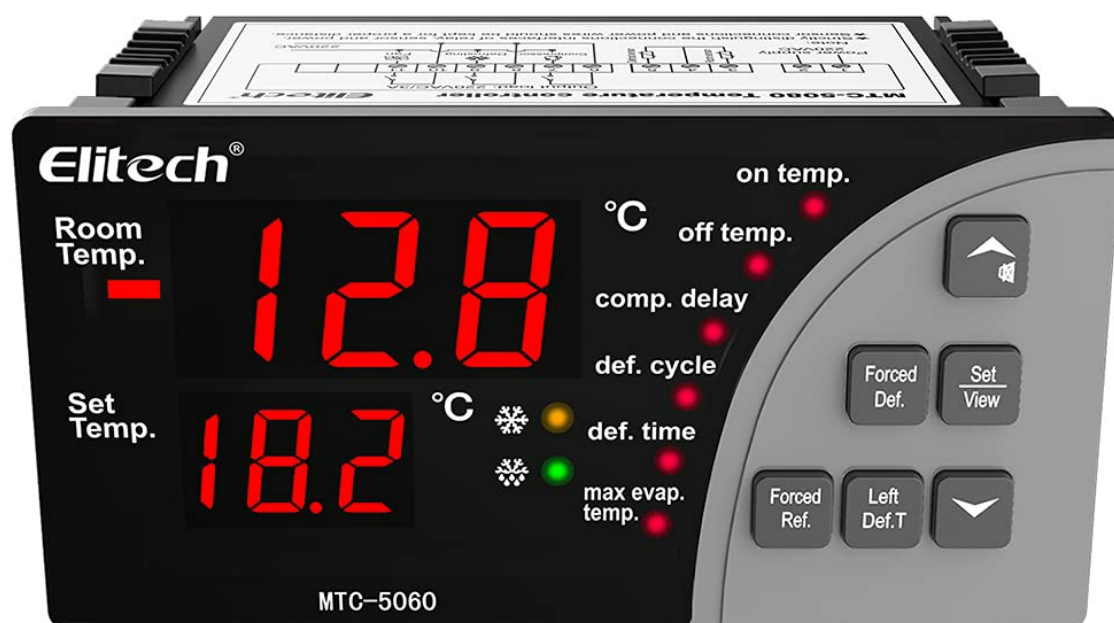


Image 3.1: Front view of the Elitech MTC-5060, highlighting its core functionalities: dual sensors, cooling, defrosting, and alarm capabilities.

3.2 Components and Indicators

The MTC-5060 features a clear digital display and intuitive control buttons. The display shows both the current room temperature and the set temperature. Various indicators illuminate to show operational status such as cooling, defrosting, and alarm conditions.



Room Temperature Sensor

Room Temperature
Sensor



Defrosting Temperature
Sensor



Temperature Alarm

Temperature Alarm



Sensor Error Alarm

Sensor Error Alarm

4. SPECIFICATIONS

Parameter	Value
Model	MTC-5060
Brand	Elitech
Voltage	110 Volts
Display Type	LCD or LED
Color	Black
UPC / GTIN	781454241521
ASIN	B097BXX2QF



Mounting Size: 92*44mm/3.6*1.7in

Image 4.1: Physical dimensions of the Elitech MTC-5060 thermostat and its mounting size.

5. SETUP AND INSTALLATION

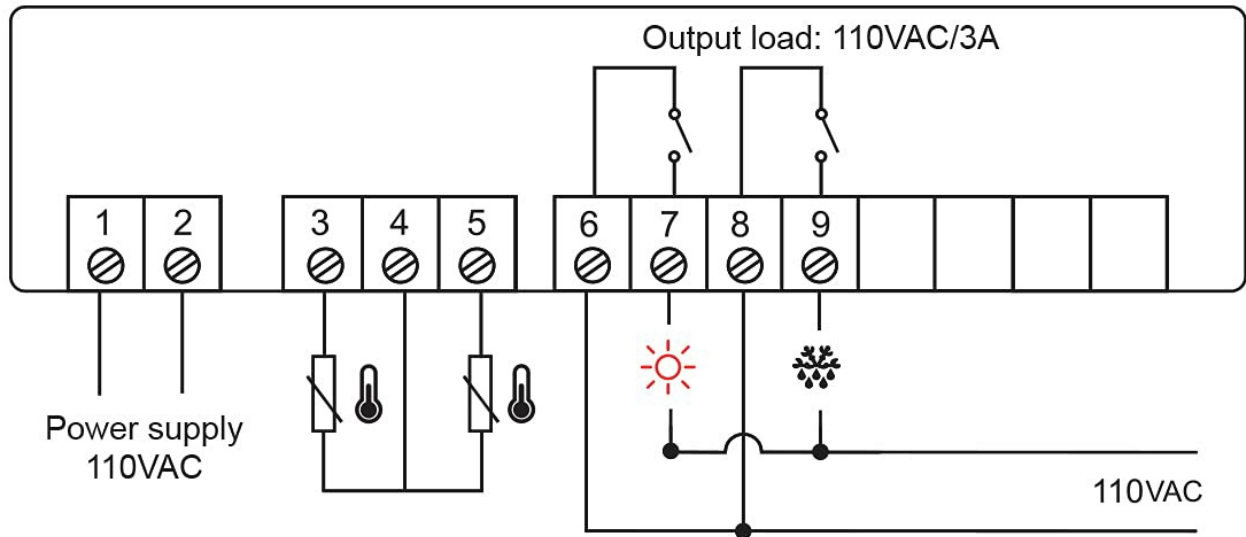
5.1 Mounting

The MTC-5060 is designed for panel mounting. Cut an opening of 92mm x 44mm (3.6 x 1.7 inches) in the desired panel. Insert the thermostat into the opening and secure it using the provided clips. Ensure sufficient space for wiring at the rear of the unit.

5.2 Wiring Diagram

Refer to the wiring diagram below for proper electrical connections. All connections must be secure and insulated. Incorrect wiring can damage the unit or pose a safety hazard.

MTC-5060



Wiring Diagram

Image 5.1: Detailed wiring diagram for the MTC-5060, illustrating connections for power, sensors, and output loads (110VAC/3A).

5.3 Sensor Connection

Connect the two temperature sensors to the designated terminals as shown in the wiring diagram. One sensor is typically for room temperature (storage), and the other for defrosting temperature (evaporator). Ensure sensors are placed correctly for accurate readings.

5.4 Power Connection

Connect the 110VAC power supply to terminals 1 and 2. Ensure the power source is stable and matches the specified voltage. Connect the cooling and defrosting loads to their respective output terminals as indicated in the wiring diagram.

6. OPERATING INSTRUCTIONS

6.1 Power On/Off

Once wired correctly, apply power to the unit. The display will illuminate, showing the current room temperature and the set

temperature. To power off, disconnect the main power supply.

6.2 Setting Temperature

To adjust the set temperature, press the 'Set' button. The set temperature will flash. Use the 'Up' and 'Down' arrow buttons to change the value. Press 'Set' again to confirm and exit.

6.3 Parameter Settings

The MTC-5060 features a multifunctional button panel for easy access to common settings without navigating complex menus. For advanced parameters such as compressor delay, defrost cycle, or temperature calibration, refer to the detailed parameter list in the full user manual (not included here). Typically, these settings are accessed by holding down specific buttons for a few seconds.



Safer and Easier

Image 6.1: The MTC-5060's user-friendly interface, designed for safer and easier operation.

6.4 Manual Defrost

To initiate a forced defrost cycle, locate the 'Forced Def.' button on the panel and press it. The defrost indicator will illuminate, and

the unit will enter a defrost cycle. The duration of the defrost cycle is determined by the configured parameters.

Note: This unit displays temperature in Celsius. Ensure your application is compatible or convert readings as needed.

7. MAINTENANCE

- **Cleaning:** Regularly wipe the display panel and casing with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Connection Checks:** Periodically inspect all electrical connections to ensure they are tight and free from corrosion.
- **Sensor Integrity:** Ensure the temperature sensors are clean and properly positioned. Avoid bending or damaging the sensor cables.
- **Ventilation:** Ensure the area around the thermostat is well-ventilated to prevent overheating.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Display shows 'HH' or 'LL'	Sensor error (open circuit or short circuit)	Check sensor connections. Replace faulty sensor if necessary.
Temperature not stable or inaccurate	Improper sensor placement; incorrect parameter settings	Reposition sensor away from heat sources or drafts. Verify parameter settings (e.g., hysteresis).
Unit not cooling/defrosting	No power to loads; incorrect set point; faulty wiring	Check power supply to the unit and loads. Verify set temperature and other parameters. Inspect wiring for loose connections.
Display is blank	No power supply	Check power connections and ensure 110V supply.

9. WARRANTY AND SUPPORT

For warranty information and technical support, please contact Elitech customer service. Keep your purchase receipt as proof of purchase. Detailed contact information can typically be found on the Elitech official website or product packaging.

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