

Danfoss 077B-7001

Danfoss 077B-7001 Refrigerator Thermostat Kit User Manual

Model: 077B-7001, W5-30101

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Danfoss 077B-7001 Refrigerator Thermostat Kit. This kit is designed to replace or upgrade the temperature control system in compatible refrigeration units, ensuring optimal performance and energy efficiency. Please read this manual thoroughly before proceeding with any installation or operation.

2. PRODUCT OVERVIEW

The Danfoss 077B-7001 Thermostat Kit includes the primary thermostat unit, a temperature sensing capillary tube, a control knob, mounting hardware, and electrical connectors. These components work together to accurately monitor and regulate the internal temperature of your refrigerator.

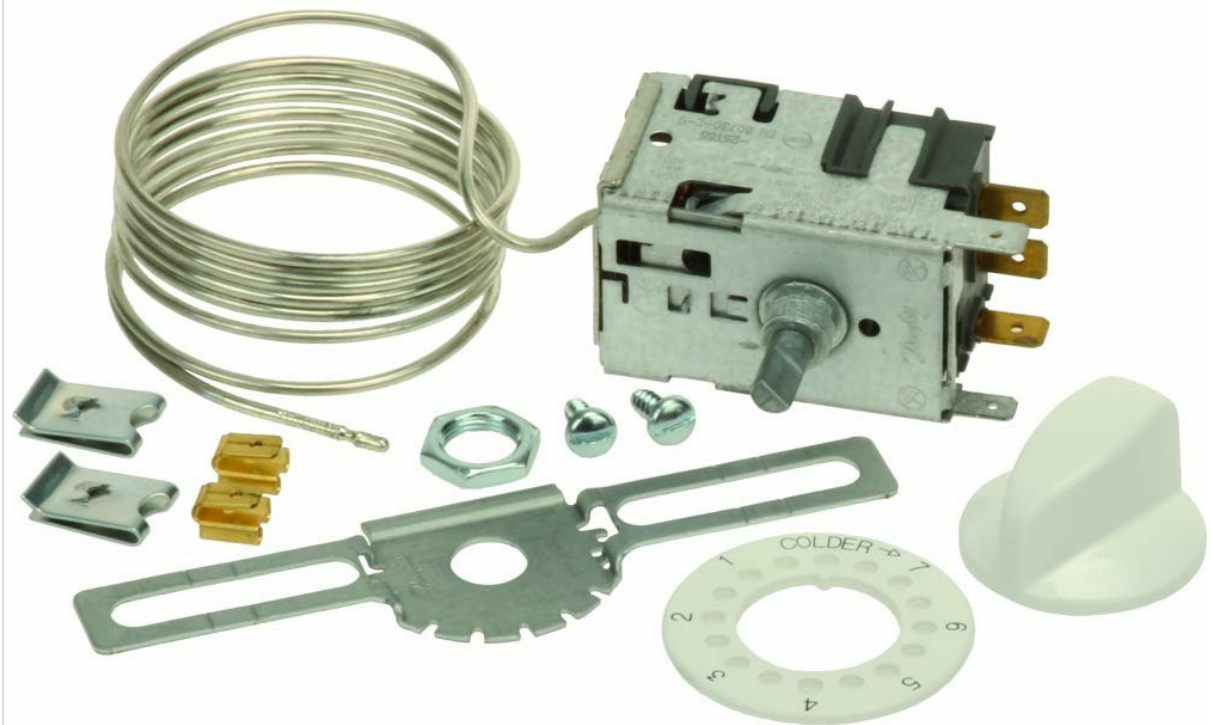


Figure 1: Components of the Danfoss 077B-7001 Refrigerator Thermostat Kit. This image displays the main thermostat body, a coiled capillary tube, a white control knob, a mounting bracket, nuts, and screws, along with several small electrical connectors.

3. SAFETY INFORMATION

WARNING: Risk of Electric Shock and Injury.

- Always disconnect power to the refrigerator before attempting any installation, maintenance, or repair.
- Installation should only be performed by a qualified technician or a person with adequate knowledge of electrical systems and refrigeration appliances.
- Ensure all electrical connections are secure and properly insulated to prevent short circuits or electrical hazards.
- Do not modify the thermostat or its components. Use genuine OEM parts for safety, reliability, and performance.
- Keep children and pets away from the work area during installation.

4. SETUP AND INSTALLATION

The installation of a refrigerator thermostat kit requires careful attention to detail and electrical safety. If you are unsure about any step, consult a professional appliance technician.

1. **Disconnect Power:** Unplug the refrigerator from the wall outlet or turn off the circuit breaker supplying power to the unit. Verify power is off before proceeding.
2. **Access Thermostat:** Locate the existing thermostat in your refrigerator. This is typically found near the control panel or inside the fresh food compartment. You may need to remove a control panel cover or trim.
3. **Document Connections:** Before disconnecting any wires, take clear photos or draw a diagram of the existing wiring connections to the old thermostat. Note the position of the capillary tube.
4. **Remove Old Thermostat:** Carefully disconnect the wires and remove the mounting screws or clips holding the old thermostat in place. Gently pull out the capillary tube from its housing.
5. **Install New Thermostat:**
 - Mount the new Danfoss 077B-7001 thermostat in the same location as the old one, using the provided mounting hardware.
 - Carefully route the new capillary tube into the temperature sensing area, ensuring it is positioned identically to the original. Avoid kinking or sharply bending the tube.
 - Connect the electrical wires to the new thermostat terminals according to your documented diagram. Ensure connections are tight and secure.
6. **Reassemble:** Replace any covers or trim panels that were removed.
7. **Restore Power:** Plug the refrigerator back into the outlet or turn on the circuit breaker.
8. **Test Operation:** Allow the refrigerator to run for several hours and monitor the temperature to ensure proper cooling. Adjust the thermostat as needed.

5. OPERATING INSTRUCTIONS

The Danfoss 077B-7001 thermostat controls the temperature inside your refrigerator. It typically features a rotary knob for temperature adjustment.

- **Temperature Adjustment:** Rotate the control knob to adjust the desired temperature. Numbers or markings on the knob (e.g., "Colder" or numerical settings) indicate relative temperature levels. A higher number or setting towards "Colder" typically results in a lower (colder) internal temperature.
- **Initial Setting:** For initial setup, it is recommended to start with a medium setting and adjust as necessary based on the actual temperature inside the refrigerator and your cooling needs.
- **Monitoring:** Use a separate refrigerator thermometer to verify the actual temperature inside the unit. The ideal temperature range for a refrigerator is typically between 35°F (1.7°C) and 40°F (4.4°C).

6. MAINTENANCE

The Danfoss 077B-7001 thermostat kit is designed for long-term reliability and typically requires minimal maintenance once installed correctly. However, general refrigerator maintenance practices contribute to its longevity and efficient operation.

- **Keep Coils Clean:** Regularly clean the condenser coils of your refrigerator to ensure efficient heat exchange, which directly impacts the thermostat's ability to maintain temperature.
- **Check Door Seals:** Ensure refrigerator door seals are intact and sealing properly to prevent warm air from entering, which can cause the thermostat to work harder.
- **Avoid Overloading:** Do not overload the refrigerator, as this can restrict airflow and lead to uneven

cooling, potentially affecting thermostat performance.

- **Inspect Wiring:** Periodically inspect visible wiring for any signs of wear, fraying, or loose connections.

7. TROUBLESHOOTING

If you experience issues with your refrigerator's temperature control after installing the Danfoss 077B-7001 thermostat, consider the following common troubleshooting steps:

Problem	Possible Cause	Solution
Refrigerator not cooling	Thermostat set too high (warm) Power supply issue Capillary tube kinked or damaged Compressor or fan issue (not thermostat related)	Adjust thermostat to a colder setting. Check power cord and circuit breaker. Inspect capillary tube for damage; replace if necessary. Consult a professional technician.
Refrigerator too cold / Freezing food	Thermostat set too low (cold) Capillary tube improperly positioned Thermostat malfunction	Adjust thermostat to a warmer setting. Ensure capillary tube is correctly placed in the sensing area. If issues persist, the thermostat may need replacement.
Refrigerator cycles too frequently	Poor door seal Overloaded refrigerator Dirty condenser coils Thermostat sensing issue	Check and replace door seals if necessary. Rearrange contents for better airflow. Clean condenser coils. Ensure capillary tube is properly seated.

For issues not listed or if troubleshooting steps do not resolve the problem, it is recommended to contact a certified appliance repair technician.

8. SPECIFICATIONS

- **Brand:** Danfoss
- **Model Number:** 077B-7001
- **Model Name:** W5-30101
- **Type:** Refrigerator Thermostat Kit
- **Power Source:** AC/DC
- **Specification Met:** OEM
- **Form Factor:** Compact
- **Pattern:** Solid
- **Power Plug Type:** No Plug
- **First Available:** February 9, 2018

9. WARRANTY AND SUPPORT

Danfoss products are manufactured to high standards and are typically covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the documentation included with your purchase or visit the official Danfoss website.

For technical support, replacement parts, or warranty claims, please contact Danfoss customer service or an authorized service center. When contacting support, please have your product model number (077B-7001) and purchase information readily available.

Danfoss Official Website: www.danfoss.com

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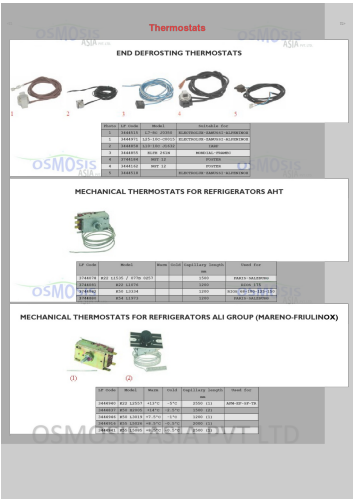
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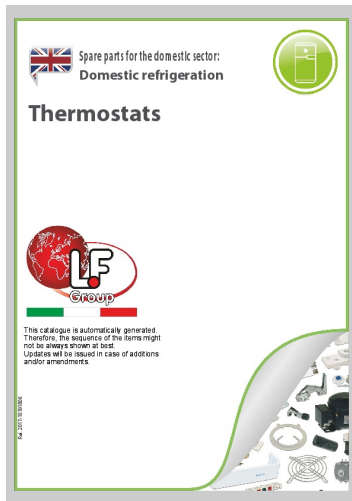
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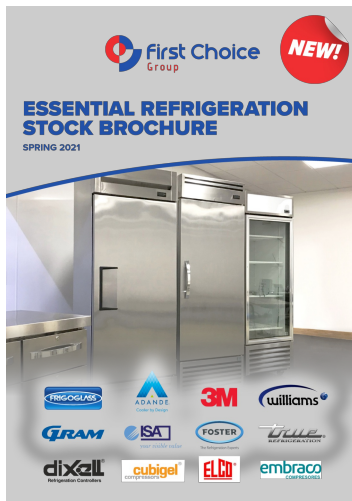


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