Norlake NOR140512

Norlake NOR140512 Dixell Control Sensor User Manual

Model: NOR140512

1. Product Overview

The Norlake NOR140512 is a genuine OEM Dixell Control Sensor designed for use with Norlake refrigeration units, specifically compatible with Model 18NB-NTC. This sensor plays a critical role in accurately monitoring temperatures within the refrigeration system, providing essential data to the Dixell control unit for precise temperature regulation and efficient operation. It features a 15-foot grey cable, allowing for flexible placement within the unit.

Image 1.1: Norlake NOR140512 Dixell Control Sensor. This image displays the sensor with its grey cable, illustrating its physical appearance.

2. Safety Information

Please read and understand all safety instructions before installing or servicing this product. Failure to follow these instructions may result in electric shock, fire, serious injury, or death.

- **Disconnect Power:** Always disconnect power to the refrigeration unit before performing any installation, maintenance, or troubleshooting.
- **Qualified Personnel:** Installation and service should only be performed by qualified and authorized personnel.
- **Genuine Parts:** Use only genuine OEM replacement parts to ensure safety, reliability, and performance.
- **Electrical Hazards:** Be aware of electrical hazards. Do not touch live electrical components.
- **Cable Integrity:** Ensure the sensor cable is not pinched, cut, or damaged during installation or operation.

3. Package Contents

Verify that all items are present and undamaged upon opening the package.

- One (1) Norlake NOR140512 Dixell Control Sensor (15 Feet Grey)

4. Setup and Installation

This sensor is an integral component of a refrigeration system. Professional installation is highly recommended to ensure proper function and safety.

1. **Power Disconnection:** Ensure the refrigeration unit is completely disconnected from its power source. Verify with a voltage meter if necessary.
2. **Access Control Panel:** Locate and open the control panel or access point where the Dixell control unit is housed.
3. **Remove Old Sensor (if applicable):** If replacing an existing sensor, carefully disconnect it from the Dixell control unit and remove it from its mounting location. Note the routing of the old sensor cable.
4. **Install New Sensor:** Mount the new Norlake NOR140512 sensor in the designated temperature sensing location within the refrigeration unit. Ensure the sensor bulb is positioned correctly to accurately measure the desired temperature.
5. **Route Cable:** Carefully route the 15-foot grey sensor cable to the Dixell control unit, avoiding sharp edges, moving parts, or areas of excessive heat. Secure the cable as needed to prevent damage.
6. **Connect to Dixell Control:** Connect the sensor wires to the appropriate terminals on the Dixell control unit. Refer to the specific Dixell control unit's manual for exact wiring diagrams and terminal assignments. Ensure connections are secure and correct polarity is observed if applicable.
7. **Secure and Close:** Secure any covers or panels that were removed.
8. **Restore Power:** Reconnect power to the refrigeration unit.
9. **Verify Operation:** Monitor the Dixell control unit's display to confirm that the new sensor is providing accurate temperature readings.

5. Operating Instructions

The Norlake NOR140512 Dixell Control Sensor is a passive component that provides temperature data to the Dixell control unit. It does not have user-adjustable settings or operational controls.

- **Temperature Monitoring:** The sensor continuously measures the temperature in its installed location and transmits this information to the Dixell control unit.
- **System Control:** The Dixell control unit uses the sensor's input to regulate the refrigeration system's operation, such as compressor cycles and defrost functions, to maintain the desired temperature set points.
- **Display Readings:** Temperature readings from the sensor are typically displayed on the Dixell control unit's interface. Refer to your Dixell control unit's manual for instructions on how to view current temperatures and system status.

6. Maintenance

Regular inspection and basic maintenance can help ensure the longevity and accuracy of your sensor.

- **Visual Inspection:** Periodically inspect the sensor and its cable for any signs of physical damage, wear, or corrosion. Ensure the cable is securely routed and not exposed to excessive stress.
- **Cleaning:** If the sensor bulb becomes dirty or covered with debris, gently clean it with a soft, damp cloth. Avoid using harsh chemicals or abrasive materials that could damage the sensor. Ensure the unit is powered off before cleaning.
- **Connection Check:** During routine system maintenance, verify that the sensor's electrical connections to the Dixell control unit are tight and free from corrosion.
- **Calibration Check:** If temperature readings appear inaccurate, consult the Dixell control unit's manual

for instructions on how to check sensor calibration or perform diagnostic tests.

7. Troubleshooting

If you experience issues with your refrigeration unit's temperature sensing, consider the following troubleshooting steps. Always disconnect power before inspecting internal components.

- **Incorrect Temperature Readings:**
  - Verify the sensor's placement. Is it in the correct location to measure the desired temperature?
  - Check for obstructions around the sensor that might be affecting its ability to read ambient temperature accurately.
  - Inspect the sensor cable for damage (cuts, pinches).
  - Ensure connections to the Dixell control unit are secure.
  - Compare the sensor reading with an independent, calibrated thermometer placed near the sensor.
- **Sensor Not Detected / Error Codes:**
  - Confirm that the sensor is correctly wired to the Dixell control unit according to its manual.
  - Check for loose or corroded connections at both the sensor and the control unit.
  - If the Dixell control unit displays a specific error code related to the sensor, consult the Dixell control unit's manual for the meaning of the code and recommended actions.
  - A faulty sensor may need replacement.
- **Intermittent Readings:**
  - This can often indicate a loose connection or a damaged cable. Inspect all wiring and connections thoroughly.

If troubleshooting steps do not resolve the issue, contact a qualified refrigeration technician or Norlake customer support.

8. Specifications

Attribute	Specification
Model Number	NOR140512
Part Type	Dixell Control Sensor
Cable Length	15 Feet
Cable Color	Grey
Compatibility	Norlake refrigeration units, Model 18NB-NTC
Product Dimensions	7 x 7 x 7 inches (packaging)
Item Weight	6.4 ounces
Manufacturer	Norlake

9. Warranty and Support

Norlake products are manufactured to high standards and are backed by a manufacturer's warranty. For

specific warranty terms and conditions, please refer to the documentation provided with your original refrigeration unit or visit the official Norlake website.

For technical support, replacement parts, or warranty claims, please contact Norlake customer service directly. When contacting support, have your product model number (NOR140512) and the serial number of your refrigeration unit available.

Norlake Official Website: www.norlake.com