**PRO³ Electronic Temperature/Defrost Controller**

For 230V PRO³ Freezer Models

**PRO³ Models:**

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<td>Defrost Temp. Probe (Blue)</td>
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<td>XR-60C Electronic Control</td>
<td>21300701</td>
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<td>XR-60C Gasket</td>
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<td>22598801</td>
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<td>PRO3 Installation &amp; Operation Manual</td>
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**Part no. 21993101**

**Important:**

All 230V low-temperature PRO³ models are equipped with either a Ranco Paragon ERC-2 or a Dixell XR-60C electronic temperature/defrost controller. The Paragon control is a two piece control consisting of a control board and separate digital display. The XR-60C is a stand-alone one piece unit. While either control may be used, it is important to note that the two controllers are **NOT** compatible and their temperature probes are **NOT** interchangeable. This kit is intended to serve as a retrofit kit for both controllers and provides all components necessary to replace either existing control. The figure below is included to assist with identifying the existing controller.

![Ranco Paragon ERC-2](image1)

**RANCO PARAGON ERC-2**

![Dixell XR60C](image2)

**DIXELL XR60C**

**Installation:**

1. **Disconnect electrical supply to the unit. There may be more than one source.**
2. Remove the weather hood (if equipped), evaporator access panel and vented condenser cover.
3. In the evaporator compartment, locate the existing room and defrost temperature probes. The room temperature probe should be located near the bottom of the coil on the entering air side. The defrost temperature probe will either be situated between the fins of the coil, or in a bulb well on the end of the coil. Note the routing of the wires and cut all zip ties holding the probes in position. Remove the probes from the unit. For ease of removal and installation, it may be necessary to remove the evaporator fan blade closest to the probes. **Be sure to mark the orientation and position of the blade on the motor shaft before removal. It is important that the blade be re-installed in the original mounting position.** Refer to the diagram on the next page for sensor locations.
4. The electronic controller and all connected wiring must be removed. In addition, the two wires connecting the “on/off” switch to the compressor contactor must be removed. On the XR−60C, these wires are bundled together in a single wiring harness with a terminal block. An existing XR−60C wiring harness would work with the new control; but it is recommended to replace the wiring harness when replacing the controller. See the electrical box diagram below.

5. Locate the new XR−60C controller, mounting brackets and gasket supplied with this kit. Install the controller as shown on the next page. Be sure that the controller is tight against the mounting panel to prevent any possible leaking.
6. Locate the new defrost temperature probe (blue) and the new room temperature probe (yellow) provided with this kit. Route the new sensors back through the electrical box and into the evaporator section of the unit. Secure the room temperature sensor in the original location using the plastic ties supplied with this kit. The new defrost temperature probe should be inserted between the fins of the coil on the leaving air side as shown below. If the defrost probe was originally mounted on the end of the coil, do not re-insert the probe into the original position. Inserting the bulb into the location shown below has been shown to improve defrosting performance.

7. Re-install the evaporator fan blade onto the motor shaft. Be sure the blade is correctly oriented and properly positioned on the shaft.

8. Locate the XR–60C wiring harness included in this kit. Wiring diagrams for each PRO³ model are located in the back of the PRO³ Installation and Operation Guide that is included with this kit. Locate the appropriate wiring diagram for your unit and install the wiring harness.

9. Re-install evaporator access panel, vented condenser panel and weather hood. Reconnect the electrical supply, turn on the unit and verify proper operation.

For additional information, please contact the Heatcraft Service Department at 1–800–321–1881.