PVR-2 Relay Units with Switches

Cumberland
1004 E. Illinois St.
Assumption, IL 62510
1. Warnings

**Warning!**

When this relay unit is used in a life support heating and ventilation system where failure could result in loss or injury, the user should provide adequate back-up, or accept the risk of such loss or injury!

**Warning!**

Wiring and connections must comply with all national and local electrical codes. Installation by qualified electrician required!

**Warning!**

Electrical shock may occur if the enclosure is opened with power connected to the unit. Before opening the enclosure, make sure that all power sources to the unit are disconnected!
2. Physical Description

The PVR-2 with Switches is shown below both closed and with the door open. The major components are labeled as well.

Assumption, IL 62510
3. **Use of Equipment**

   This unit is used to control a curtain (vent) machine from a separate controller (with dry contacts), and still allow local manual control of curtain (vent) position. This relay box does not have a thermostat, or any temperature sensing device to use in operating the machine.

4. **Installation**

   1. Mount unit to wall near power supply.
   2. Connect nine conductor wire from PowerTrak to the terminals shown on the wiring diagram in the back of this manual.
   3. Connect wires from controller to terminals as shown in the wiring diagram in the back of this manual. Note that the unit requires dry contacts for automatic operation, as the PVR-2 has it’s own power supply.
   4. Close door and apply power to the machine.
   5. Test machine by placing the Automatic/Manual switch in “Manual”, and by toggling the Open/Close/Off switch in the direction you want to test the controller.
   6. If the controller operates backwards (machine opens with switch in close position), switch the wires as shown on the wiring diagram in the back of the manual. (This procedure is labeled “To Reverse Open and Close Directions”.

5. **Operation**

   5.1. **Manual Control**

   When the Automatic/Manual switch is in Manual, the controller will open and close the curtains or vents whenever the bottom switch is in its open or close position. The center position of the switch is the off position.

   5.2. **Automatic Control**

   To place the PVR-2 in automatic operation, select “Automatic” with the top toggle switch on the control box. The terminals (position 10, 11, and 12 on the terminal strip) need to be connected through dry contacts wired as shown in the wiring diagram at the back of the manual.

   Position 10 is the open terminal, position 11 is the close terminal, and position 12 is common terminal.

6. **Wiring Diagram**

   This section contains wiring diagrams of each model of the PVR-2 relay box. All connections are shown, as well as controller hookup.
6.1. **PVR-2 with Switches (120V, 60Hz)**

[Diagram of PVR-2 with Switches (120V, 60Hz)]
6.2. **PVR-2 with Switches (240V, 60Hz)**
6.3. PVR-2 with Switches (240V, 50Hz)
Limited Warranty - Protein Products

The GSI Group, LLC. ("GSI") warrants products which it manufactures, to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months from the date of purchase (or, if shipped by vessel, 14 months from the date of arrival at the port of discharge). If, in GSI’s sole judgment, a product is found to have a defect in materials and/or workmanship, GSI will, at its own option and expense, repair or replace the product or refund the purchase price. This Limited Warranty is subject to extension and other terms as set forth below.

Warranty Enhancements: The warranty period for the following products is enhanced as shown below and is in lieu of (and not in addition to) the above stated warranty period.

<table>
<thead>
<tr>
<th>Product</th>
<th>Warranty Period</th>
</tr>
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<tbody>
<tr>
<td>AP® Fans</td>
<td>3 Years</td>
</tr>
<tr>
<td>AP® and Cumberland® Flex-Flo/Pan Feeding System Motors</td>
<td>2 Years</td>
</tr>
<tr>
<td>Electronic Controls</td>
<td>24 Months from date code on part</td>
</tr>
<tr>
<td>Cumberland® Feeding and Watering Systems</td>
<td></td>
</tr>
<tr>
<td>Feeder System Pan Assemblies</td>
<td>5 Years, prorated **</td>
</tr>
<tr>
<td>Feed Tubes (1.75&quot; and 2.00&quot;)</td>
<td>10 Years, prorated *</td>
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<tr>
<td>Centerless Augers</td>
<td>10 Years, prorated *</td>
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<tr>
<td>Watering Nipples</td>
<td>10 Years, prorated *</td>
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</tbody>
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* Warranty prorated from material list price:
  0 to 3 years - no material cost to end user
  3 to 5 years - end user pays 25%
  5 to 7 years - end user pays 50%
  7 to 10 years - end user pays 75%

** Warranty prorated from material list price:
  0 to 3 years - no material cost to end user
  3 to 5 years - end user pays 75%

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(Protein Limited Warranty_REV01_ 06 November 2018)