DESCRIPTION

The 10-045 Purge Panel is an accessory unit for use with Fike’s Fire Suppression Systems. It is designed to provide a 10 - 60 minute soak period before allowing the purge fans to be operated. LED's are provided for visual annunciation of “Agent Soak”, “Purge Ready”, and “Purge” conditions. A key operated “Purge” switch is provided to prevent unauthorized persons from turning on the purge fans.

The electronic components are housed in a sheet metal enclosure suitable for surface mounting with conduit knock-outs provided on both sides to allow easy electrical access to panel interior.

OPERATION

During normal standby operation, all LEDs are off. Upon receiving a discharge signal from the Agent control panel, the red “Agent Soak” LED is illuminated and the 10-60 minute timer started.

At the end of the soak period, the red “Agent Soak” light will extinguish and the green “Purge Ready” light is illuminated. Operating the keyed “Purge” switch, at this time, will turn off the green “Purge Ready” light, turn on the yellow “Purge” light, and transfer the two sets of relay contacts, which start the purge fans to remove the Agent from the protected area. If the keyed “Purge” switch is turned during the “Agent Soak” time, the panel will switch to the “Purge” mode at the end of the “Agent Soak” time period.

Resetting the system control panel will automatically reset the 10-045 Purge Panel.

PROCEDURE TO SET “AGENT SOAK” TIMER

1. Locate the “Timer Adjust” trimpot in the upper right hand area of the control board as shown in Exhibit 4.

2. This trimpot adjusts the time period from minimum to maximum. The minimum setting of 10 minutes is obtained by turning the trimpot fully counter-clockwise. The maximum setting of 60 minutes is obtained by turning the trimpot fully clockwise.

Note: The “Time Adjust” trimpot is a multi-turn device. It takes 20 - 25 turns to go from 10 minutes to 60 minutes, therefore, one turn of the trimpot equals 2 - 3 minutes of time.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Purge Panel State</th>
<th>LED Operation</th>
<th>Output Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Normal</td>
<td>Off</td>
<td>Off</td>
</tr>
<tr>
<td>On</td>
<td>Soak (10-60 min)</td>
<td>Red</td>
<td>Off</td>
</tr>
<tr>
<td>On</td>
<td>Off</td>
<td>Green</td>
<td>Off</td>
</tr>
<tr>
<td>On</td>
<td>Purge (Soak Completed)</td>
<td>Off</td>
<td>Green</td>
</tr>
</tbody>
</table>

Exhibit 1: 10-045 Purge Panel

Exhibit 2: Panel Operation

SPECIFICATIONS

- Input Voltage: 24 VDC
- Power Consumption:
  - Standby: 0 W.
  - Operating: 2.5 W. Max.
- Relay Contact Ratings:
  - 10A @ 120 VAC30 VAC Resistive
  - 7A @ 120 VAC/30 VAC Inductive
- Agent Soak Time: Field Adjustable 10-60 minutes
- Operating Temperature Range: 10°F - 120°F (12.2°C – 48.8°C)
- Size: 10” x 6 1/4” x 2 7/8” (25.4cm x 15.8cm x 7.3cm)
- Weight: 4 lbs. (1.81kg)
INSTALLATION

1. Remove the purge control board assembly from the enclosure and set aside in a safe place.

2. Refer to Exhibit 3 for enclosure mounting dimensions. Use #10 fasteners, or equivalent ones, to mount the panel in a readily accessible and easily visible location. The mounting surface must be flat and vibration free, in an area that is relatively clean and dry.

3. Install conduit and complete field wiring. Provide sufficient wire inside the enclosure for final connection.

4. Reinstall the purge control board and insure it is mounted securely to the standoffs.

5. Connect all wiring terminations according to the diagram provided. Refer to Exhibit 4 for typical wiring diagram.

Exhibit 3: Purge Panel Dimensions

Exhibit 4: Purge Panel Wiring Diagram
CHECKOUT

1. With a voltmeter check the voltage on terminals 1 and 2 for 24 VDC. Terminal 1 should be positive and terminal 2 should be negative.

2. Put the control panel into the “Discharge” mode. Check to see that the red “Agent Soak” light is on. The timer will start at this time.

3. At the end of the time cycle the “Agent Soak” light will go off and the green “Purge Ready” light will come on.

4. Insert the key into the “Purge” switch and turn 90° clockwise. The “Purge Ready” light will go off, the yellow “Purge” light should come on, and the purge fans should start at this time.

5. Return the “Purge” switch to the normal position and remove the key. The panel should return to the “Purge Ready” condition and the purge fans should stop.

6. Reset the control panel. All LED’s on the purge panel should now be off.