

### Open Circuit Detection for a 4-20mA Input

**Problem:** I need a low pressure alarm on my instrument air system, but I can't afford to have a system shutdown if the pressure transmitter fails and the header pressure is still acceptable. I also want to use the signal for monitoring in the Control Room.

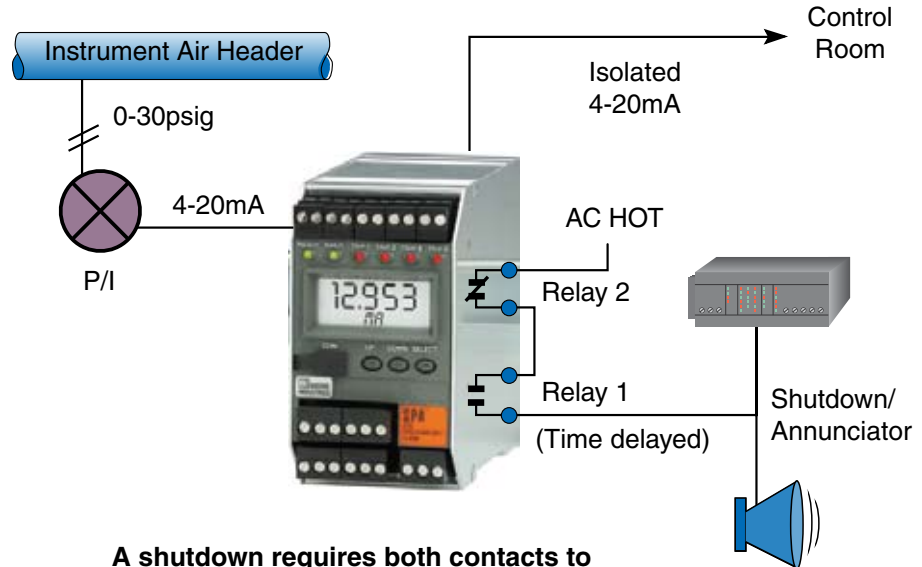
**Solution:** A SPA<sup>2</sup> Programmable Alarm with a dual relay and analog output will do the job. Set Relay 1 with a time delay to close when the header pressure falls below an acceptable level and Relay 2 to open if the pressure transmitter fails so a shutdown will not occur.

#### Model Number Example

**SPA2 / HLPRG / 2PRG / U / -AO [DIN]**

[Go to Limit Alarm Trips and Switches Selection Guide](#)

### Limit Alarm Trips and Switches



**A shutdown requires both contacts to be closed indicating the transmitter is working and the pressure is low**