

# TECHNICAL FIELD BULLETIN

Issued: 04/09

**TO:** All Users of System Sensor D4120  
**FROM:** Technical Services  
**SUBJECT:** Wiring Diagram for D4120 to SSK451 with PS24LOW

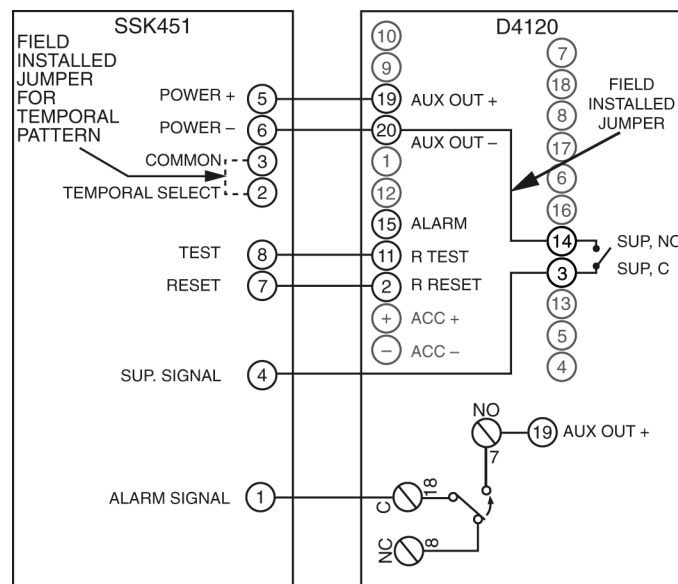
Technical Support has uncovered an issue with the D4120 duct smoke detector when used with the SSK451 and the PS24LOW.

While the maximum alarm output of the D4120 varies depending on temperature and tolerances of the electrical components, a 50 mA minimum is guaranteed across the entire environmental operating temperature. However, because the PS24LOW has a maximum inrush around 75 mA, it may trigger the short-circuit protection on the D4120 at some operating temperatures.

In addition, since its alarm output threshold can change with temperature, a D4120 used with the PS24LOW that functions properly at installation may short circuit if the temperature fluctuates drastically. In controlled environments, near-constant temperatures will reduce this occurrence.

One potential solution is to power the SSK451/PS24LOW, terminal 1, to the + Aux Output, terminal 19, through the AUX B relay contacts of, 7 and 18.

## WIRING DIAGRAM FOR D4120 TO SSK451 WITH PS24LO



**NOTE:** WIRING DIAGRAM SHOWN IS FOR D4120 4-WIRE DUCT SMOKE DETECTOR SYSTEM EQUIPPED WITHOUT A CONTROL PANEL.

If you have any questions regarding System Sensor products, codes, or their application, please call Technical Support at 1-800-SENSOR2 (736-7672 ext. 2).