

Oven Exhaust Monitor

Applications:

- Oven Exhaust Monitor
- Commercial Oven Exhaust Monitor
- Commercial Oven Evacuation Flow Switch
- Industrial Oven Evacuation Monitor
- Industrial Oven Evacuation Flow Switch

Application Background:

Before igniting the gas in a large commercial or industrial oven a minimum of three (3) turnovers of the air in the oven is recommended in case there is an unsafe fuel leak or capture. Monitoring this air flow turnover is essential during the pre-ignition sequence. Typically a flow switch is installed in the exhaust stack to verify positive flow and turnover through the oven.

Application Solution:

There are many techniques to provide for the air flow monitoring switch. A pressure switch is probably the most common technique. However pressure switches are vulnerable to coating from the product passing through the oven and can often fail prematurely. Further pressure switches may not work in higher temperature oven applications. A thermal flow switch provides for a more reliable technique and without any moving parts.

With a single process connection into the exhaust stack (MNPT or flange), any of Delta M's flow switch models (microtuf® or VersaSwitch®) can provide a reliable output relay contact indicator when activated by the air flow. An added feature of the VersaSwitch® is its second channel relay tripped by a failure alarm option which monitors the switch itself for proper power input, sensor and electronics status. With the failure alarm option you have assurance and confidence that the oven air flow switch is armed and ready to perform its alarm function when the time comes.

For full details go to our website, www.deltamcorp.com to the products tab and look for Manuals. Find the dual channel Model VS5100 Versa-Switch® product manual. Section 10.2 will explain how the Failure Alarm Option can be provide a "Watchdog" feature for your oven exhaust monitoring application.