

Monitoring blower motor speed and vent position

APPLICATION A103

Type of Company: [Manufacturer, Centrifugal Air Compressors](#)

Location: [Missouri](#)

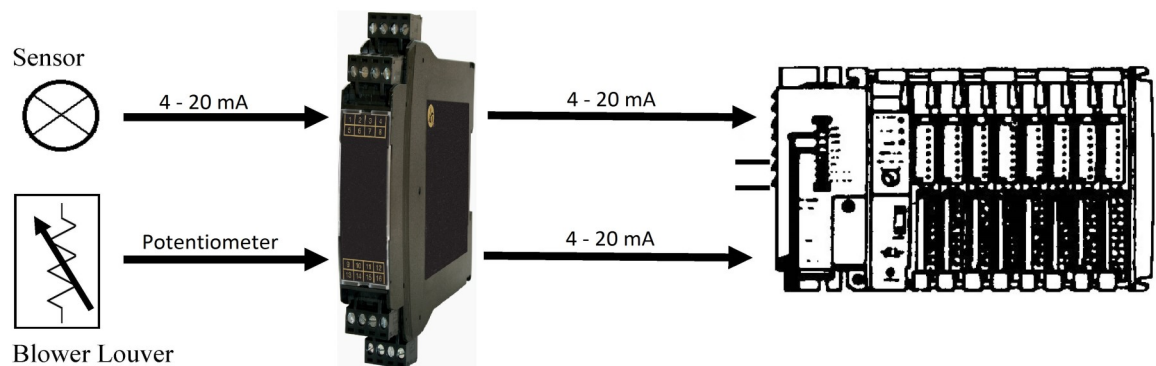
High-efficiency centrifugal air compressors are typically used for municipal wastewater aeration as well as myriad other industrial process applications. These systems are aerodynamically designed to minimize turbulence, thus streamlining flow through the compressor for the downstream aeration system. They maintain excellent efficiency throughout the entire operational range of the compressor and can provide overall control and monitoring of the aeration system.



Image courtesy of Petr Novak, Wikipedia

The Engineering Issue

- The engineer has a requirement for signal conversion/isolation on a 4-20 mA motor speed control loop and a resistance feedback loop for blower louver position.
- The PLC they are using needs single-ended, sinking inputs for both channels.



The engineer used a custom modified APD 2208 unit. The APD 2208 is a two channel unit with one channel being a potentiometer input and the other a DC input. The APD units are field-configurable for sinking or sourcing.

Problem. Solved.