

# API-Cecom Group *n'fo*

## Technical & Application Note A103

Application: Monitoring blower motor speed and vent position  
 Type Of company: Equipment Manufacturer -- Centrifugal Air Compressors  
 Location: Missouri

**Problem:** This customer manufactures high efficiency, centrifugal air compressors for municipal wastewater aeration, and a myriad of industrial process applications. These systems are used to provide instrumentation and controls for the downstream aeration system, and perform instrumentation/controls upgrades for all makes of centrifugal blowers/compressors. The customer required signal conversion/isolation on a 4-20 mA control loop and a resistance feedback loop for blower louver position. The units the customer was using had an isolated sourcing 4-20 mA output. This means they are generating their own current loop but the SLC500 programmable Logic controller (PLC) required a single ended input.

**Solution:** API modified versions of their existing DC to DC converter and their Potentiometer to DC converter and then assigned customer specific part numbers for the customer.

*Alternate Solution: APD 2208—This is a two channel unit with one channel being a potentiometer input and the other a Dc input.*



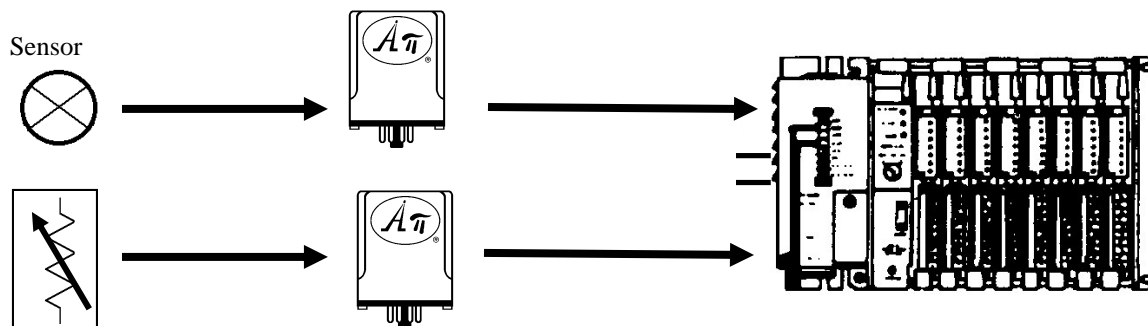
API 4300 G

DC to DC Isolated Transmitter



API 4003 G

Potentiometer to DC Isolated Transmitter



Blower Louver

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 Where People Answer The Phone  
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