

Absolute Process Instruments, Inc.

Manufacturer of Quality Signal Conditioners Transmitters & Isolators

Application Notes

- General Info
- Temperature
- Pressure
- Flow
- Speed
- Weighing
- Process

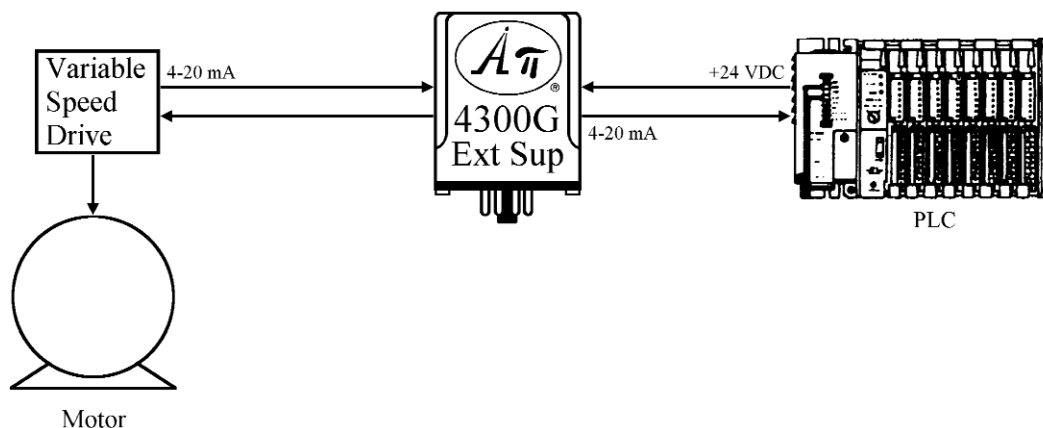
Monitoring Motor Speed with a PLC

PROBLEM

A variable speed drive has an internally powered 4-20 mA output proportional to the speed of the motor it is driving. The motor speed must be monitored by a programmable logic controller (PLC) for use in control of a process, but the 4-20 mA input of the PLC is also powered from the PLC's built-in power supply. The standard **API 4300 G** Isolated DC to DC Transmitter generates a 4-20 mA output at a 20 V compliance voltage. The output of the module would conflict with the power generated by the PLC input channel.

SOLUTION

An **API 4300 G EXTSUP** Isolated DC to DC Transmitter module with External Supply modification will allow the drive's powered output to be transmitted to the PLC's powered input.



The external supply modification uses the +24 VDC power supplied by the PLC and regulates the 4-20 mA output signal in proportion to the input signal it receives from the variable speed drive. The 2000 VRMS isolation of the module protects against unexpected ground loops and electrical noise.

Did You Know...?

Many PLC inputs are isolated only from the backplane they plug into and not channel to channel. Api's isolators can eliminate this problem.

FREE APPLICATION ASSISTANCE

Call  Customer Service

800-942-0315

