

Reduce Installation Cost with a Current Measurement and Alarm Contact in One Sensor

The latest AC current transducer from NK Technologies uses a revolutionary design of combining two sensors into one package. This combination reduces installation costs and allows the circuit control to take less space in crowded panels. This also provides local control of a motor starter coil or a visual alarm without having to wire the digital output back to the controller, again saving time and expense.

The ingenuity of the design is shown in the method of alarm point adjustment. With power supplied to the sensor, a three digit LED display is activated. A potentiometer on the top of the sensor is turned, and the display changes to show the amount of current needed to actuate the contact. The trip point can be set before the monitored circuit is energized. Other designs require the installer to adjust the trip point while the primary load is powered, or often leave the adjustment at the minimum so the contact closes at any amount of current.

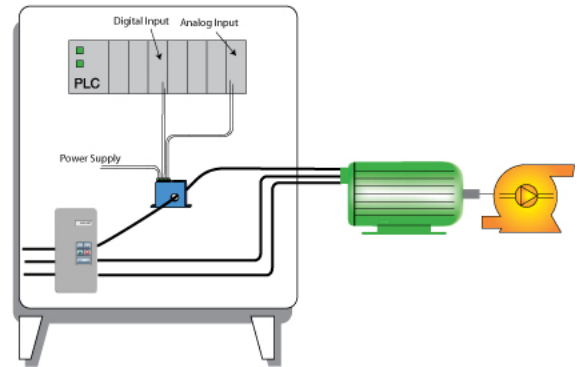
The ATS Current Transducer is ideal for monitoring equipment such as:

Conveyors: Use the alarm contact to turn on a revolving beacon light when a jam occurs, while the analog signal reports usage to a data acquisition system.

Pumps: The analog signal is fed to a local panel meter to display current use, and the contact closes to alarm on low current caused by loss of head pressure.

Grinders: The analog signal is sent to a PLC to record time of use and estimate power consumption while the contact controls the starter coil, shutting the machine down if an overload occurs, quicker than standard overload protection, reducing the chance of damage and lessening clean out time.

Pump Jam and Suction Loss Protection



The ATS Current Transducer/Switch with Digital Setpoint Display

The new AC current transducer combines two sensors into one package. The factory set analog output calibration produces an accurate and stable signal by eliminating field zero and span adjustments. The FL model features a digital display that gives visual indication of the setpoint for greater accuracy.

The ATS-FL Series sensors are available with a choice of 4–20 mA, 0–5 VDC or 0–10 VDC output; each output offers a range that is proportional to either 0–50 amps or 0–200 amps. In addition, there is a solid-state contact which can be adjusted to activate when AC current reaches a predetermined magnitude.

The contact can be used to set off an alarm or shut down the system, depending on your requirements. The trip point is adjustable from 2% to 100% of the analog range, and can be verified at any time by viewing the LCD display on the sensor. Any adjustments made by unauthorized personnel will be displayed, further improving overall system reliability.



The ATS-FL Series digital display shows the setpoint for greater accuracy.