Absolute Process Instruments, Inc.
Manufacturer of Quality Signal Conditioners Transmitters & Isolators
Application Notes

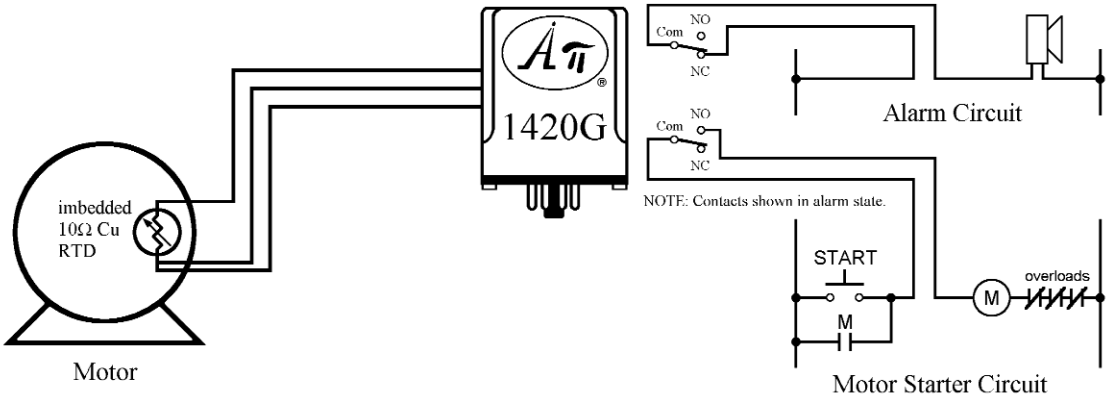
Motor Overheating Alarm and Shutdown

PROBLEM

A motor in a critical process is subject to overload and burnout. An alarm is to be sounded when the motor reaches its rated temperature. The motor is to be shut down if it exceeds its rated temperature by 10 degrees.

SOLUTION

A 10 ohm copper RTD commonly imbedded in many motors is connected to an **API 1420 G** RTD Input Dual Alarm Trip module which provides two independent setpoints and two independent isolated Form C (NO/NC) relay contacts. One set of these contacts is wired to an alarm or annunciator panel to alert the proper personnel of the overload condition. The other set of contacts is wired in series with the coil of the motor starter and shuts down the motor when tripped.



Setpoint 1 is adjusted to the rated temperature, and Setpoint 2 is adjusted to the rated temperature plus 10 degrees. The standard heavy-duty relay contacts are rated 7A @ 240 VAC and can directly control most devices.

FREE APPLICATION ASSISTANCE
Call Api Customer Service
800-942-0315

Did You Know...?

All Api dual alarm modules can be configured for HI/HI, HI/LO or LO/LO operation.