

UDC 3300 APPLICATION NOTE

AUTO-MANUAL STATION

PROBLEM

Provide an **auto-manual station** which accepts the output of a critical loop controller and re-transmits a hard 4-20 mA output signal to the final control element during the normal operation. When necessary, during an emergency or servicing of the loop controller, the operator must be able to override the output signal from loop controller and manually adjust the output signal to the control value between 0 and 100% (4-20 mA).

SOLUTION

Specify a basic UDC 3300 with current output. When configured for proportional mode only and direct action with a gain = 1 (PB = 100%), the UDC will re-transmit the critical loop controller's output signal when in the **Automatic** mode. By selecting **Manual** mode, the operator may manually adjust the signal to the control valve to any value between 0 and 100%. If needed, an **output bias** of $\pm 100\%$ may be entered directly from the front panel of the UDC 3300 to allow staged operation of the final control element. This feature is often required for *boiler master* applications. The recommended model number is: **DC330B - Kx - 00x - 20 - xxxxx0 - 00**. This application is illustrated below.

