

ADM239XCDIP-1760 Process Deviation Control Unit

- Suitable for SIL 1 & SIL 2 safety system (IEC61508) loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options: 115Vac / 230Vac $\pm 20\%$
24Vac $\pm 10\%$
24Vdc / 48Vdc $\pm 10\%$
110Vdc $\pm 10\%$
- RFI Protection to IEC61000-4-3:2006/A2:2010 available ('K' option)
- AMELEC Standard 10 year warranty

Technical Specifications

Inputs

Input 1= Calibrated Dial on unit front fascia, to set a desired constant Pressure reference within the 0-1999 Pa range. (nom 1760Pa)

Input 2= 4-20mA representing actual Pressure (impedance 20ohms)

Input 3= Link (or Termination point for N.O relay contact when used in conjunction with the ADT123XCDIP-1oo2 Temperature Trip Amp)

Output

4-12-20mA to Fan speed Control unit (max load 1200ohms)
Associated fan speed control unit is set for 12mA as the ideal speed.

Functions

When used with the ADT123XCDIP 1oo2 High Temperature Trip output relay contact terminated in i/p3, then as either one of the two temperature readings exceeds the nom 59°C set point the contact will open at i/p3, causing an o/c input condition to be seen & maximum low deviation away from the nom pressure set point, so driving the output hard Upscale & resulting in maximum fan speed. Otherwise a hardwired Link should be fitted across i/p3 terminals.

As the Actual Pressure i/p2 Signal deviates from the nom 1760Pa Set Point (i/p1) by +(xx)% high, the Output will decrease by -(xx)% from 12-4mA to slow down the associated fan speed control unit.

As the Actual Pressure i/p2 Signal deviates from the nom 1760Pa Set Point (i/p1) by -(xx)% low, the Output will increase by +(xx)% from 12-20mA to speed up the associated fan speed control unit.

When the Actual Pressure (i/p2) signal equals the nom 1760Pa Set Point (i/p1) + i/p3 terminal is closed/healthy, then the Output = 12mA for ideal fan speed control.

Isolation: 1000V RMS Input(s)/Output/Supply/Earth

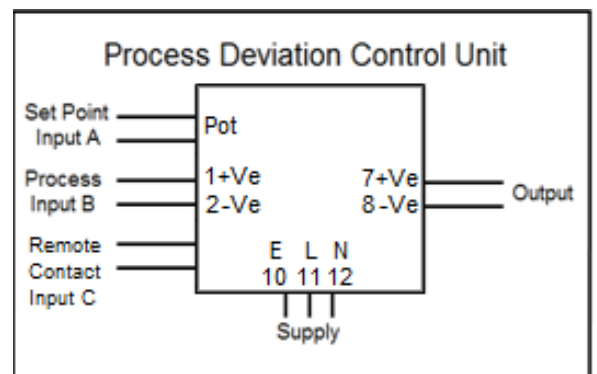
Accuracy/Linearity: $\leq \pm 0.1\%$ span

Input 2 or 3 Open Circuit Response: Upscale Drive/ >20mA output

Environmental Conditions

Storage Temperature: -40 to 70°C
Operating Ambient: -15 to 55°C
Relative Humidity: 5 – 95% RH

Dimensions: 50w x 75h x 155d mm enclosure (incl terminals)
Front Bezel= 57w x 96h mm (panel cut out = 51w x 76h mm)



Rear Terminals Shown