

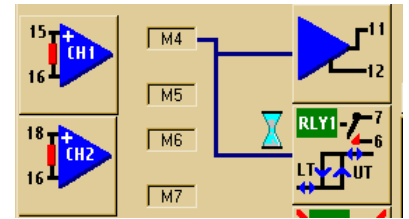
Average Of Two With Drop Out UAP1120

This is a application program for the USC701.

Input: 2 x 4-20mA

Output: 4-20mA = average of 2 inputs.

If one input drops below 4mA, the output = the other input only.



Change history

This is issue 'b' of UAP1120.

Issue 'a' used the state of RLY1 and RLY2 to determine if the input has dropped below 4mA.

Issue 'b' checks when the signal drops below 0% to determine if the input has dropped below 4mA.

Operational Description

- CH1 and CH2 both produce an internal engineering signal of 0-100% for an input of 4-20mA.
- M4 produces a 0-100% signal that is the average of both CH1 and CH2 if both inputs are above 0% input.
- If CH1 is below 0% then the output at M4 is the 0-100% signal from CH2.
- If CH2 is below 0% then the output at M4 is the 0-100% signal from CH1.
- If both inputs are below 0% then M4 will follow CH2 (that is below 0% or less than 4mA out).

User Adjustments

All measurements are normalised to 0-100%.

The relays may be configured to operate off CH1, CH2 or M4.

Calibration of CH1, CH2 and the 4-20mA output are accessible using the AM702 in trim mode.

Additional Functions

The values of CH1, CH2 and M4 are accessible using hot-keys on the AM702.

- Press UP to display CH1 (CH1%).
- Press DOWN display CH2 (CH2 %).
- Press BACK to display M4 (out %).