

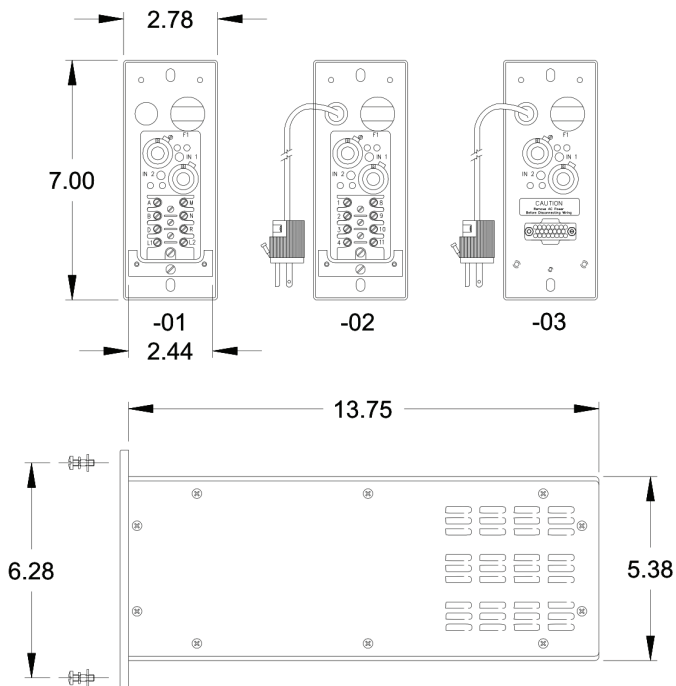
DAM503

The DAM503 Dual Alarm Module replaces the obsolete Foxboro H line bi-stable instrument, as a solid-state unit that produces a voltage or contact closure when one input or two inputs exceed preset limits.

All input, output, and logic options are available with the DAM503. Input polarities and difference functions are completely configurable. Changes are made by moving internal jumpers.



DAM503-03



- “-01” = Terminal Block
- “-02” = Terminal Block w/ Power Cord
- “-03” = M 20 Connector w/ Power Cord

Possible Input Modes

- Dual (each input feeds an independent output)
- Single (one input feeds both outputs)
- Difference (input A less input B feeds both outputs)
- Deviation (output A = input A less input B, output B = input B less input A)

Possible input ranges

- 0 to 20 mA (or 4 to 20 mA) into 249.9 Ω
- 0 to 50 mA (or 10 to 50 mA) into 100 Ω
- 0 to 5 V (or 1 to 5 V) into 500 k Ω
- 0 to 10 V (or 2 to 10 V) into > 166 k Ω

Possible trip modes:

- Trip on rising signal
- Trip on falling signal

Possible output logic:

- Solid State NO
- Solid State NC

Possible output ranges:

- Internal 120 Vac @ 2.5 A max., 300 VA max. per channel (supply voltage)
- Internal 168 Vdc, @ 1 A max., 300 VA max. per channel (unregulated, unfiltered, no load bridge-rectified supply voltage)
- Dry contacts, ac or dc, 400 V peak, 3 A continuous max. per channel, 0 to 1 MHz

NUSI 500 Series

Dual Alarm Module

SPECIFICATIONS

Power Supply Voltage:	5 W (nominal), 10 VA (maximum) [not including internally supplied wetting voltages]
Fuses:	F1: 1 to 8 A, 250 Vac type 3AG (Indicating type is standard)
	F2: 7 A, 250 Vac, PC board mount
	F3 (and F4): 3 A internal, fast acting type GBB, in-line with each output
Time Response:	Less than 5 ms from application of a step change at the input to a change in the output (resistive load) of 63% of the final value for solid state outputs (filters bypassed or not in the circuit)
Accuracy:	Repeatable to 0.5% of input span with 2% dial setting accuracy for the trip point
	Reset point repeatable to 0.5% of input span
Sensitivity:	Better than ± 5 mV at the input
Set Point Range:	0% to 100% of input range, dial calibrated in percent
Deadband:	0.5% to 25% of input range (20 mV minimum deadband required), 20 turn (minimum) recessed pot accessible from front panel
Dielectric Withstand:	1000 Vdc and 1000 Vac (RMS) common mode rejection for input to output
	1000 Vdc and 750 Vac (RMS) for output to ground
Surge Withstand:	No damage when the waveform of IEEE-472-1974 is applied to any port
Electrical Qualification:	Plant protection, qualified to IEEE 323-1974/1983 and IEEE 344-1975/1987
Ambient Temperature:	35 °F to 122 °F (2 °C to 50 °C) (normal operation)
	122 °F to 135 °F (50 °C to 57 °C) (abnormal operation for 200 hours)
	-40 °F to 185 °F (-40 °C to 85 °C) (storage)
Temperature Effects:	Less than 0.04 % of input full scale change in set and reset points for each
	1 °C change in ambient temperature (less than 0.33% per 15 °F change)
Relative Humidity:	0% RH to 95% RH, non-condensing (operating)
	0% RH to 99% RH, non-condensing (storage)
Pressure:	Atmospheric
Radiation Limits:	104 rad TID gamma

HOW TO ORDER

The model number and configuration typically should be specified as follows:

DAM503-01

DAM503-02

DAM503-03

CONTACT INFORMATION:

Curtiss-Wright Nuclear Division / I&C Products
1350 Whitewater Drive, Idaho Falls, ID, 83402 T: (208) 497.3333