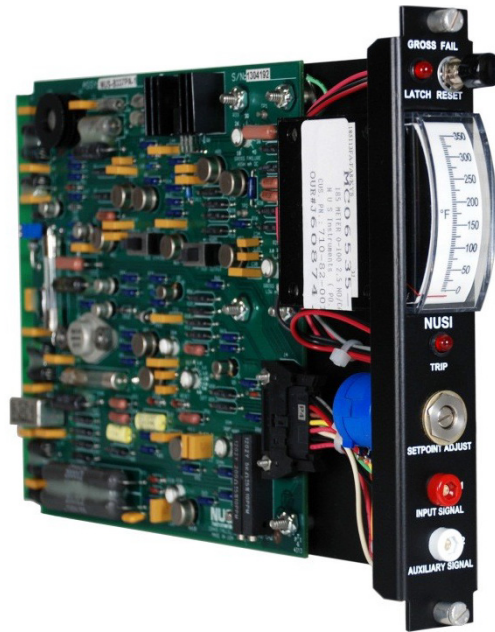


NUS-710DU0TT Master Trip Unit

NUSI Analog Safety System Replacements

**CURTISS -
WRIGHT**



NUS-710DU0TT Master Trip Unit

Designed to be a one-to-one replacement for the master trip units in the Emerson-Rosemount Model 710DU Master Trip/Calibration System, Curtiss-Wright's NUS-710DU Master Trip Units directly match the form, fit, and function of the units they replace.

The NUS-710DU Master Trip Unit is utilized by each 4 to 20 mA transmitter; when the input signal passes through a pre-set trip-point, the trip unit produces a trip output signal and, when the input signal is outside pre-set high or low limits, a gross failure signal.

In addition to trip and gross failure outputs, the Master Trip Unit also produces two buffered analog output voltages that are proportional to the input signal. One analog output is used to drive up to seven Slave Trip Units, establishing as many as eight trip points for a single input signal. The second analog output voltage, also known as the auxiliary analog output, is used to drive external recording or monitoring equipment.

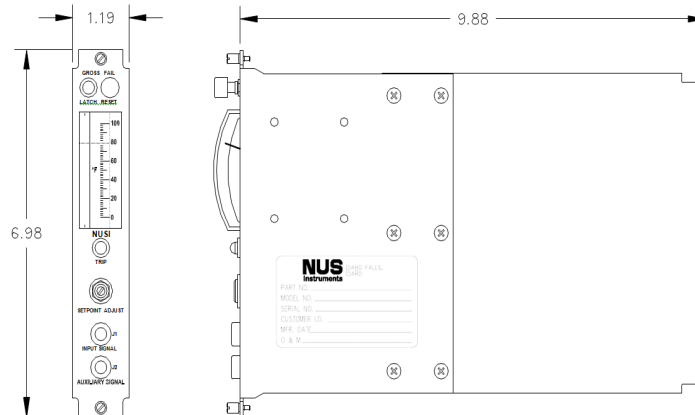
The NUS-710DU Master Trip Units are designed to mount within an Emerson-Rosemount or Scientech Card File, and the rear edge of each card includes a single-sided edge connector with gold-plated contacts. All electrical connections are made at screw-type terminations on the rear of the Card File connector.

NUS-710DU0TT Master Trip Unit

NUSI Analog Safety System Replacements

NUS-710DU0TT Master Trip Unit Technical Specifications

Function	Specifications
Input	4 – 20 mAdc into 250Ω
Outputs	24 Vdc (nominal) for trip, gross failure, and calibration status 12 Vdc (nominal) for trip status 1 Vdc to 5 Vdc analog signal proportional to input
Meter	0.2 mA to 1.0 mA dc Vertical mount 53° (1.785") of rotation full span Scales to order
Analog Output Accuracy	± 0.15% (60°F to 90°F) ± 0.35% (over 90°F)
Repeatability	Normal ±0.13% Extended ±0.35% Accident (Temp & Humidity) ±0.40% Accident (Radiation < 8 x 10 ⁴ rads TID) ±0.50% Accident (Radiation < 2.2 x 10 ⁵ rads TID) ±0.40%
Fuses	Two 1.5A, fast acting, 250 Vac, Type 3AG, axial leads
Current Drain	260 mA, including 20 mA transmitter current
Temperature Range	Normal 60 to 90°F Extended to 160°F for 24 hours once per year Accident to 185°F for 6 hours, then 150°F for 8 hours
Humidity Range	Normal 40 to 50 %RH Extended to 90%RH for 24 hours once per year Accident to 90%RH for 14 hours
Input Power & Voltage Range	22 to 28 Vdc
Radiation	10 ⁵ rad (air) TID gamma over 20 years (normal operation) 2 x 10 ⁵ rad (air) TID gamma in 24 hours (accident)
Environmental Qualification	RG 1/89 / IEEE-323 mild environment
Seismic Qualification	RG 1.100 / IEEE-344, 1.75G SSE
EMI/RFI Qualification	None



Outline and Dimensions of the NUS-710DU0TT Master Trip Unit

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