



*Manufacturers of Process  
Controls and Instrumentation*

# ***Instruction Manual***

Model: *TUA-XS*

Function: *Terminal Mount Alarm Trip*

Input:  X=1: 1-5 mA  
 X=2: 4-20 mA  
 X=3: 0-1 mA  
 X=4: 10-50 mA  
 X=5: 1-5 VDC  
 X=6: 0-10 VDC  
 X=7: \_\_\_\_\_

Output:  Form "C" Dry Contact

Power:  24 VDC, 160 mA

Serial #: \_\_\_\_\_

(If special or required)

For Technical Assistance And Questions Call  
USA: (231) 788-2900 CANADA: (905) 660-5336

## Restocking Policy

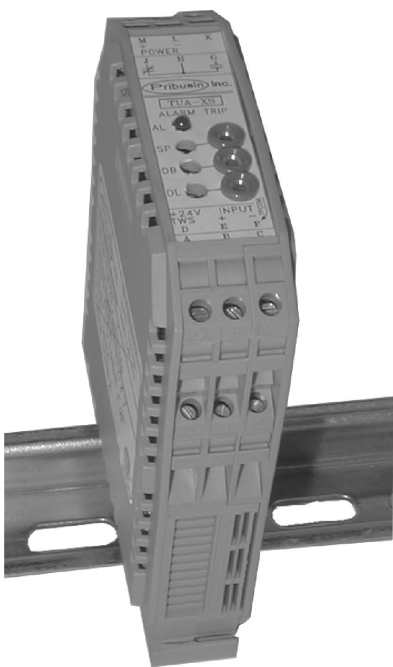
**All product returned to Pribusin Inc. in prime condition (not damaged, scratched or defaced in any way) within seven (7) months from the original date of shipment is subject to a 50% restocking charge. All product must be accompanied by a Return Authorization number (RA number) which must be obtained from Pribusin Inc. prior to returning any product.**

**After seven (7) months from the original date of shipment, products cannot be returned for restocking.**

**Custom designed products, modified products or all non-standard products may not be returned for restocking.**

## Warranty Policy

**Pribusin Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective, on its return to Pribusin Inc., transportation charges prepaid, within one year of its original purchase. Pribusin Inc. will extend the same warranty protection on equipment, peripherals and accessories which is extended to Pribusin Inc. by the original manufacturer. Pribusin Inc. also assumes noliability, expressed or implied, beyond its obligation to prelace any component involved. Such warranty is in lieu of all other warranties, expressed or implied.**



### Standard features:

- High Input-Output-Power Isolation (1500VAC Test)
- Small Size - Fits on Terminal Block Rail
- 1 Form "C" Contact Output with ON delay or ON and OFF delay
- Individual Setpoint, Deadband, Delay Adjustment
- Easy Field Calibration (Typ. calibration time < 2 min. using handheld meter only)
- Microprocessor Controlled for High Accuracy
- Two Wire Supply Option for Two Wire Transmitters
- Power: 24 VDC, 60 mA
- High Noise Rejection
- CSA and NRTL Approved (LR 51078)

### Function:

The TUA-XS Alarm Trip is a microprocessor based instrument. It can operate as a high trip or as a low trip (selectable by push-on pins inside the instrument). The relay can be configured as a normally-energized or normally de-energized. A built in two wire supply can be used to connect two wire sensors to the TUA-XS. The output is a SPDT (form "C") contact rated at 10 Amps, 1/8 Hp at 125 VAC. The deadband can be adjusted from 0-100%. The delay is adjustable from 0-1 minute and can be configured as ON delay only or as ON and OFF delay.

### Calibration:

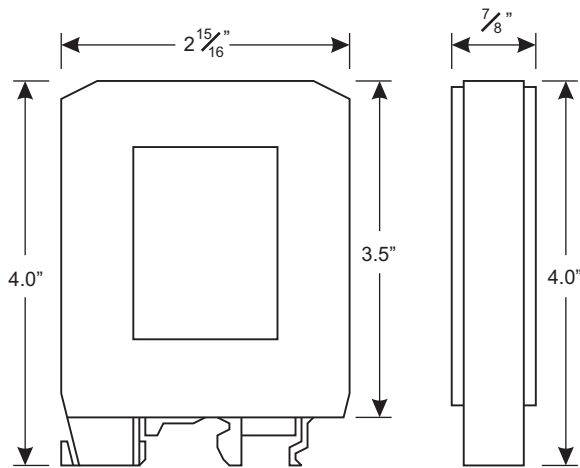
The TPz (Test Points) are used to calibrate the setpoint, deadband, and delay functions of the TUA-XS. A voltage of 0-5 VDC on TPz represents a setting of 0-100% of the parameter z. Any parameter can be changed while the TUA-XS is in operation thus making it easy to perform field adjustments.

### Input Selection:

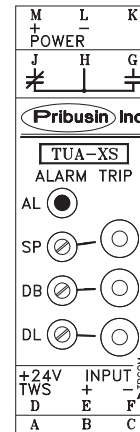
- X=1: 1 to 5 mA (Zin=1K Ohm)
- X=2: 4 to 20 mA (Zin=250 Ohm)
- X=3: 0 to 1 mA (Zin=5K Ohm)
- X=4: 10 to 50 mA (Zin=100 Ohm)
- X=5: 1 to 5 VDC (Zin=1Meg Ohm)
- X=6: 0 to 10 VDC (Zin=1Meg Ohm)
- X=7: Special Input

# TUA-XS

## Dimensions:

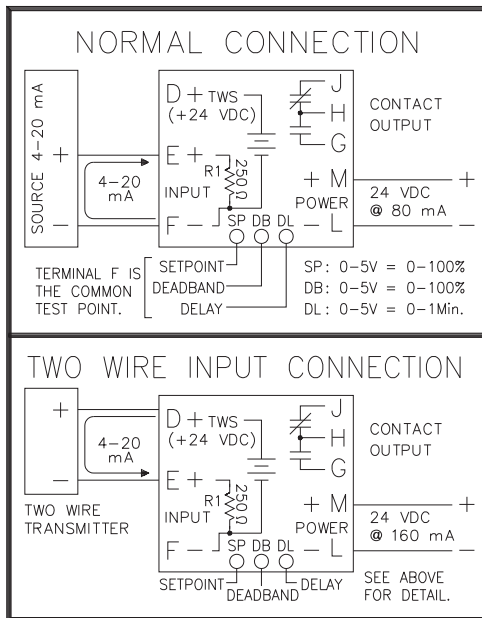


## Connection:



Calibration is made easy by multi-turn potentiometers with test points for meter connection

## Connection:



## Configuration:

	Out	In
H1	High Trip	Low Trip
H2	Energized	De-Eng.
H3	4-20mA I/P	0-20mA I/P
H4	ON Delay Only	OFF and ON Delay

The above table shows H3 for a 4-20 mA or 0-20 mA device. The same offset/zero-based input configuration holds true for all other input types.

## Specifications:

Accuracy/Linearity: +/-0.3% max., +/-0.1% typ.  
 Response Time: approx. 100msec  
 Operating Temperature: -40 Deg.C to +50 Deg.C  
 Contact Rating: 10A 1/8 Hp @ 125 VAC  
 6A 1/8 Hp @ 277 VAC

Manufactured By:

**Pribusin Inc.**

www.pribusin.com  
 info@pribusin.com

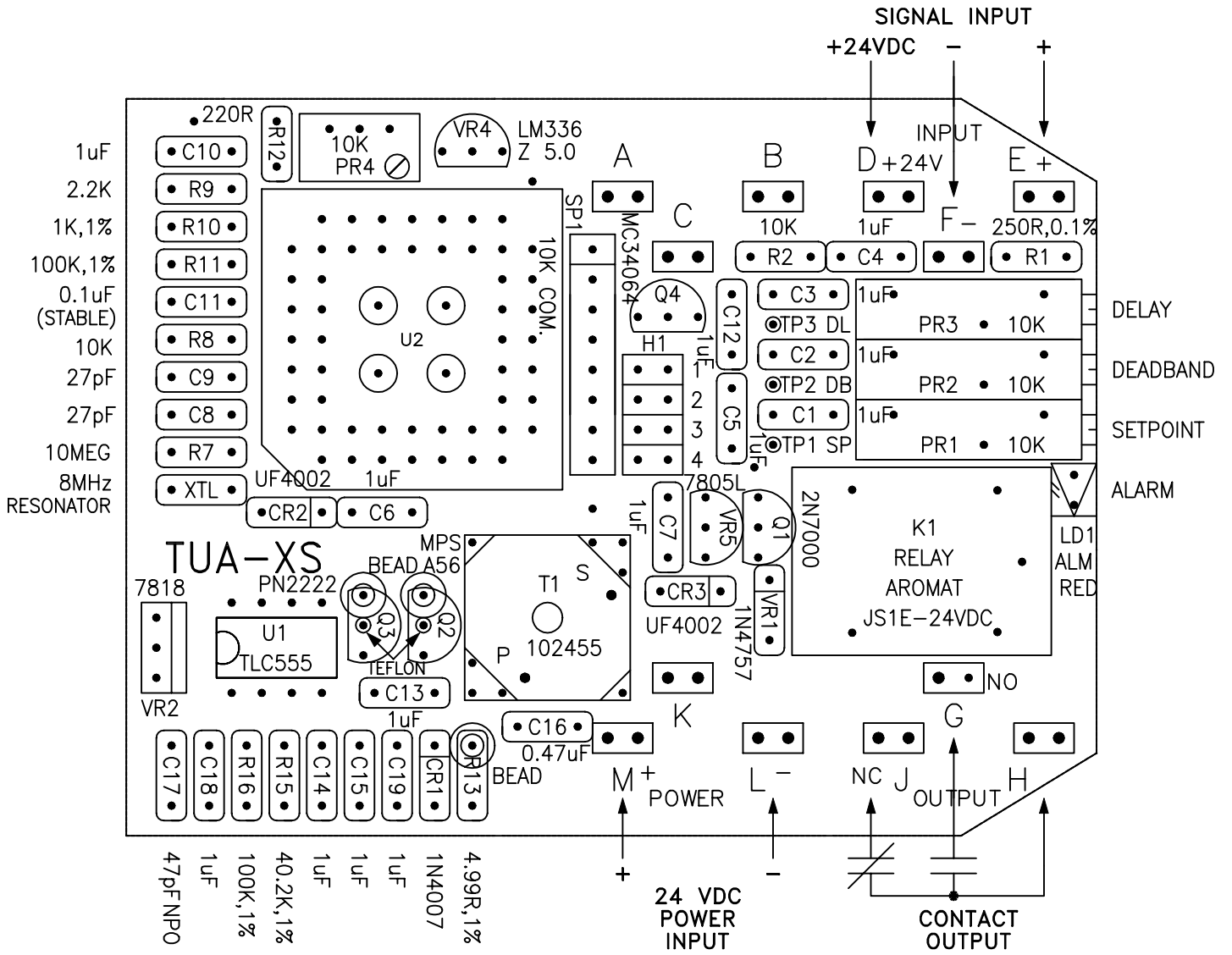
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HEADER	FUNCTION	
	JUMPER OUT	JUMPER IN
H1		
1	HIGH TRIP	LOW TRIP
2	RELAY ENG.	RELAY DE. ENG.
3	INPUT 4-20 mA	INPUT 0-20.0 mA
4	ON DELAY ONLY	OFF AND ON DELAY

<b>Pribusin Inc. ©</b>		
CHKD:	DATE: JUNE 16/92	DRN: KS
<b>Model: TUA-XS</b> <b>Terminal Universal Alarm Trip</b> <b>Schematic and Layout</b>		
DWG. NO.:	103910-2 Sht. 2 of 2	REV. C