



*Manufacturers of Process
Controls and Instrumentation*

Instruction Manual

Model: *TWN-RTX-TB:*

Function : *TwoWire Non-Isolated RTD Transmitter*

Input Range:

- | | |
|--|--|
| <input type="checkbox"/> X=1:0-300 DEG. F. | <input type="checkbox"/> X=4: 0-750 DEG. F. |
| <input type="checkbox"/> X= 2: 0-400 DEG. F. | <input type="checkbox"/> X=5: 0-1000 DEG. F. |
| <input type="checkbox"/> X= 3: 0-500 DEG. F. | <input type="checkbox"/> X=6: -350-+1100 DEG. F. |
| | <input type="checkbox"/> X=7: _____ |

Output: 4-20mA

Power: 12 to 60 VDC

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

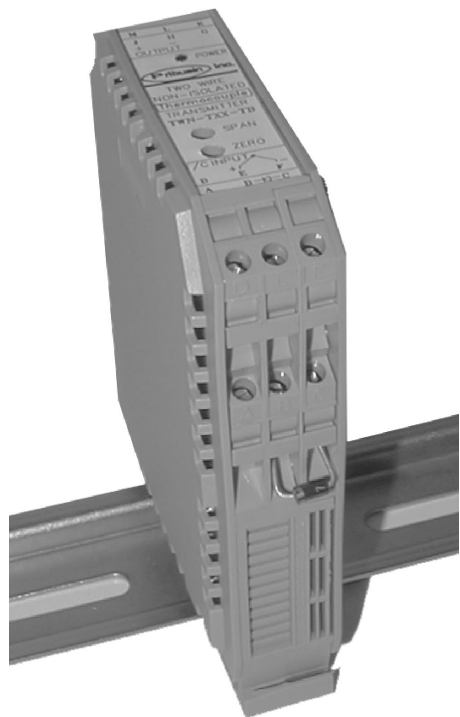
Pribusin Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective, on its return to Pribusin Inc., transportation charges prepaid, within one year of its original 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.

Pribusin Inc.

Manufacturers of Process
Controls and Instrumentation

Model: TWN-RTX-TB

Two Wire Non-Isolated RTD Transmitter



Standard features:

- Small Size - Fits on Terminal Block Rail
- Industry Standard 4-20 mA Output
- Standard Ranges for 100 Ohm Platinum
- Special Ranges and other RTD Types Available
- Wide Operating Range (8 to 60 VDC)
- High Noise Rejection
- CSA and NRTL Approved (LR 51078)

Function:

The TWN-RTX-TB is a non-isolated two wire RTD transmitter in a small, easy to install package. It has a universal DIN mount which makes it ideal for installation into crowded control panels. The many different temperature ranges allow it to be used in a great variety of temperature measurement applications.

Temperature Conversion Equations:

$$^{\circ}\text{C} = \frac{5}{9} (^{\circ}\text{F} - 32)$$

$$^{\circ}\text{F} = \frac{9}{5} ^{\circ}\text{C} + 32$$

$$\text{Kelvin} = ^{\circ}\text{C} + 273.15$$

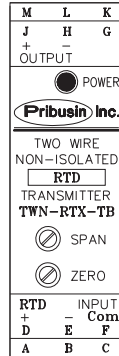
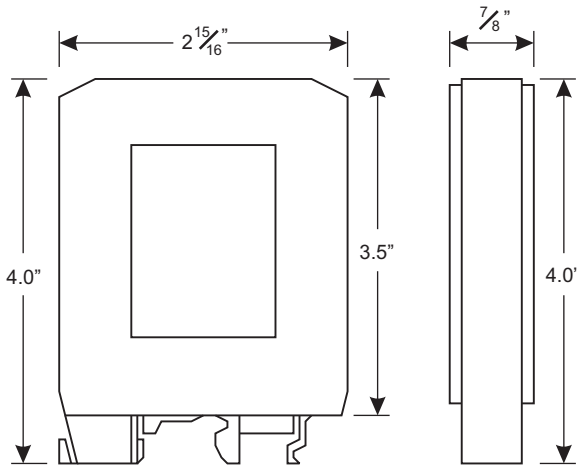
$$\text{Rankin} = ^{\circ}\text{F} + 459.67$$

Specifications:

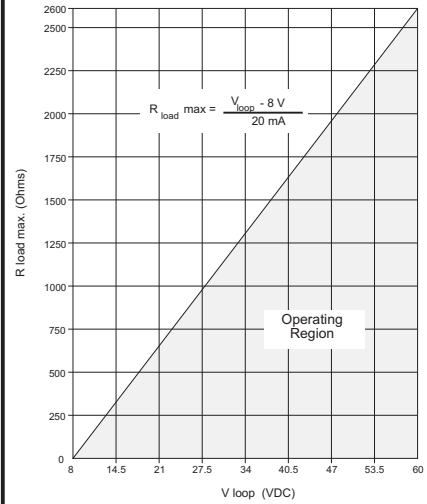
- Output: 4-20 mA
- Operating Power: 8 to 60 VDC
- RTD Type: Platinum, 100 Ohms at 0 Deg.C.,
0.0385 Alpha
- Accuracy/Linearity: +/-0.25% max., +/- 0.1% typ
(Linearized to RTD Curve).
- Response Time: 100 msec to 63% of final value
400 msec to 99% of final value
- Temperature Effects: +/- 0.025% per Deg.C.
- Line Effects: 0.03% per 10 VDC Line Change
- Operating Temperature: -20 Deg. C. to +40 Deg. C.

TWN-RTX-TB

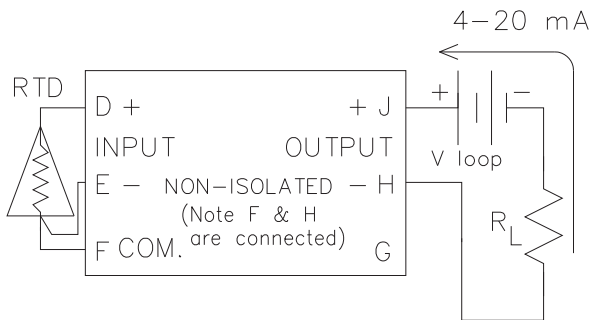
Dimensions:



Loop Characteristics:



Connection:



Model Designation:

TWN-RTX-TB

Temperature Range

- 1: 0 to 300F (-18 to 150C)
- 2: 0 to 400F (-18 to 205C)
- 3: 0 to 500F (-18 to 260C)
- 4: 0 to 750F (-18 to 400C)
- 5: 0 to 1000F (-18 to 538C)
- 6: -350 to 1100F (-200 to 600C)
- 7: Special (must specify on order)

Example: Non-Isolated RTD Transmitter for 100 Ohm Platinum RTD for 0-500 Deg.F. is designated by: TWN-RT3-TB

Manufactured By:

Pribusin Inc.

www.pribusin.com
info@pribusin.com

USA:

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743 Marquette Ave.
Muskegon, MI 49442
Ph: (231) 788-2900
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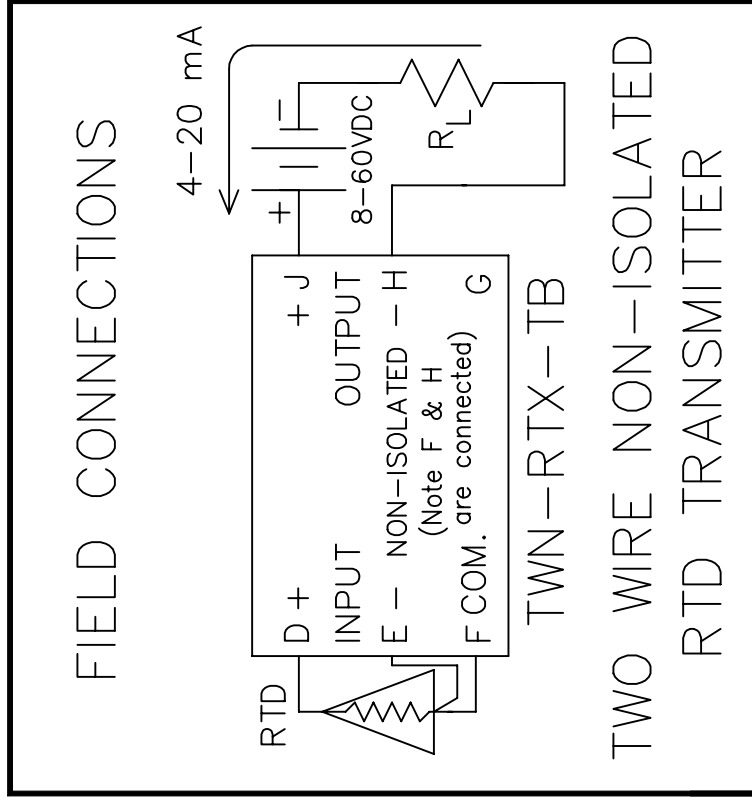


CANADA:

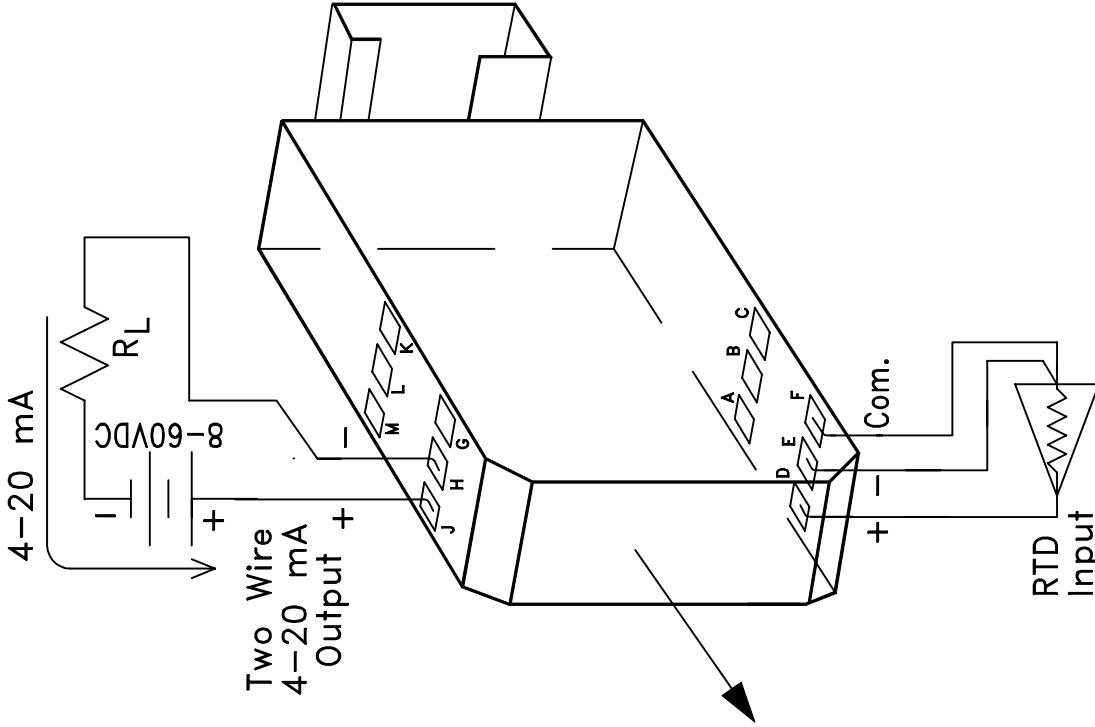
Pribusin Inc.
101 Freshway Dr. Unit 57
Concord, Ontario, L4K 1R9
Ph: (905) 660-5336
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Notes:

1. For Details of Terminal Block Enclosure/ Din Rail See Dwg. 104384.
2. The TWN-RTX-TB is Non-Isolated. For applications that require Isolation, the TWI-RTX-TB must be used.



M	L	K	POWER			
J	H	G				
+ OUTPUT -						
TWO WIRE NON-ISOLATED TRANSMITTER						
RTD INPUT			SPAN ZERO			
TWN-RTX-TB						
RTD +	INPUT -	Com	<table border="1"> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table>	A	B	C
A	B	C				
D	E	F				



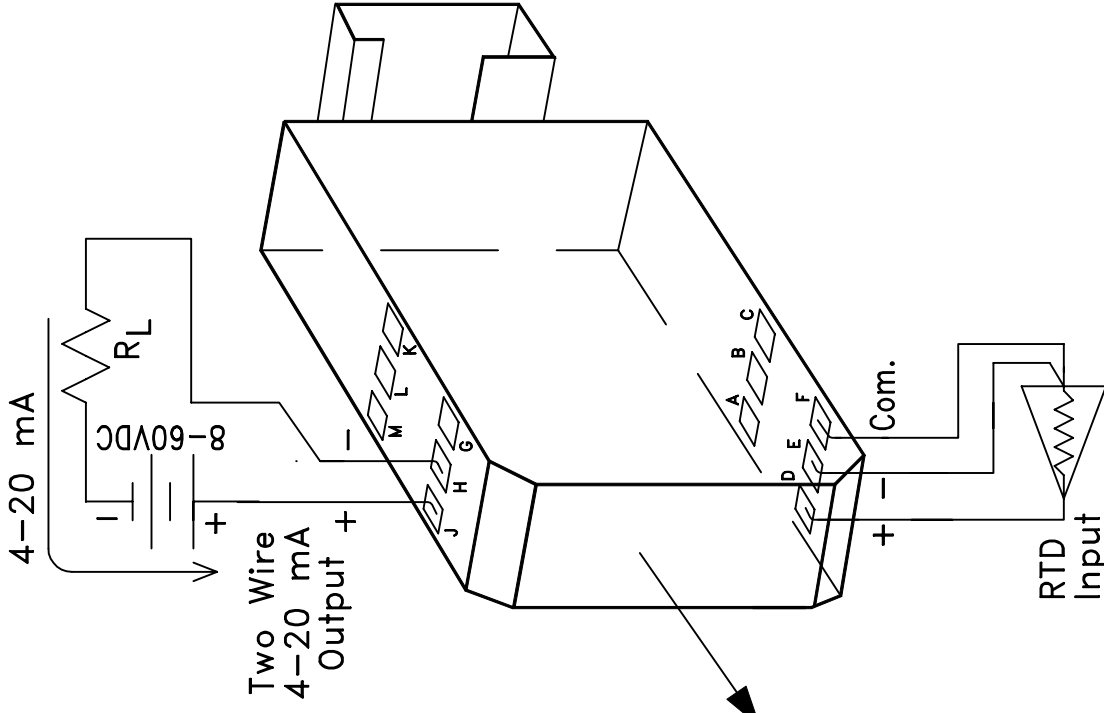
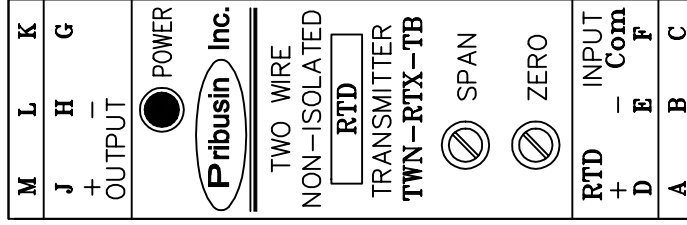
CHKD :	DATE : NOV. 08/94	DRN: KS	
Model: TWN-RTX-TB Two Wire Non-Isolated RTD Transmitter Connection Diagram			
DWG. NO. :	105177-1		REV. A

Notes:

1. For Details of Terminal Block Enclosure/ Din Rail See Dwg. 104384.
2. The TWN-RTX-TB is Non-Isolated. For applications that require Isolation, the TWI-RTX-TB must be used.

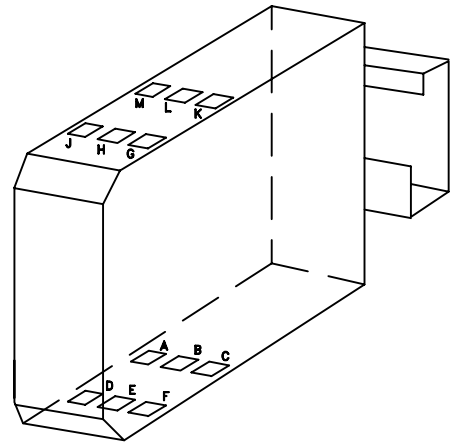
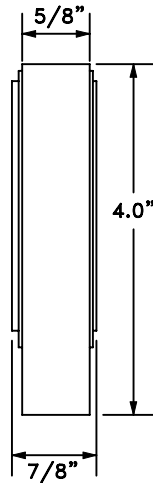
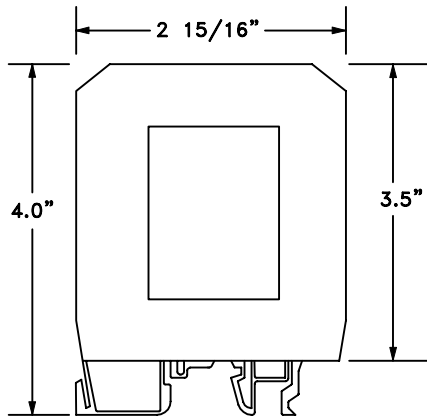
Calibration Procedure:

1. Apply an input signal equal to 100 % of the input range.
2. Adjust the Span potentiometer for an output of 20.00 mA.
Note: If the output will not go down to 20.00 mA, then adjust the Zero potentiometer to get down to 20.00 mA.
3. Apply an input signal equal to 0 % of the input range.
4. Adjust the Zero potentiometer for an output of 4.00 mA.
5. Repeat steps 1 to 5 until no further adjustments are required.



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CHKD :	DATE : NOV. 08/94	DRN: KS
Model: TWN-RTX-TB Two Wire Non-Isolated RTD Transmitter Calibration Procedure		
DWG. NO. :	105177-2	REV. A

Enclosure Detail :



Din Rail Detail :

	<p>A</p> <p>Rail Standard EN 50 035 Dimensions: 32 x 15 x 1.5 mm</p>
	<p>B</p> <p>Rail Standard DIN EN 50 022 Dimensions: 35 x 15 x 2.3 mm</p>
	<p>C</p> <p>Rail Standard DIN EN 50 022 Dimensions: 35 x 7.5 x 1 mm</p>
	<p>D</p> <p>Rail Standard DIN EN 50 022 Dimensions: 35 x 15 x 1.5 mm</p>

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CHKD:

DATE: APR. 26/93

DRN: KS

Terminal Block Enclosure/
Din Rail Detail

DWG. NO. :

104384

REV. A