TEMPERATURE TRANSDUCER

- **2 wire 4...20mA connection**
- **Wide operating range**
- **Low price**
- **0.5% accuracy**

MODEL: TT-R-100

The TT-R-100 is used to convert a platinum RTD temperature sensor to a 4-20 mA signal to interface with your energy management panel. The output is proportional over a selected span.

The resistance change of the RTD passes through a bridge to the amplifier and is converted to a proportional d.c. current in the output stage. The output current is controlled through a feedback circuit and thereby becomes independent of load. A diode protects against reverse polarity. This technology is field proven and has been capable of withstanding rigorous environmental chamber testing while retaining linearity without damage.

This technique produces a very reliable system with good accuracy at an excellent price.

TECHNICAL DATA

Stock Ranges
-50 to +50C
0 to +35C
0 to +50C
0 to +100C

Models
TT-BB-R-100   Blue Box Mounted
TT-ST-R-100   Snap Track Mounted
TT-DR-R-100   DIN Rail Enclosure Mounted
You can change the first two characters of any EMCS temperature sensor from TS to TT and specify the range.
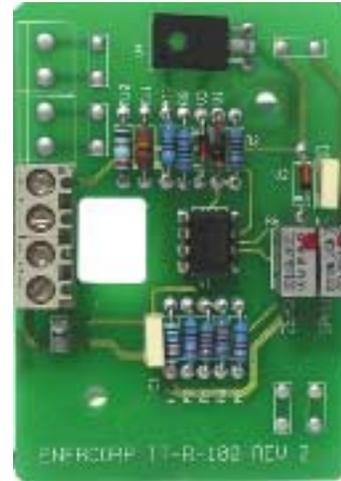
Initial Calibration
+/- 0.2%

Linearity
+/- 0.1% of span

Operating Temperature
-20 to +70C

Temperature Drift
Less than 0.012% Span / degC

Supply Voltage
15 to 30 Vdc (nominal)

Supply Voltage Error
0.01% max of fullscale per volt deviation from 24Vdc

Maximum Load
(Vsupply-12)/20mA

Load Error
0.02% max of full scale per 100 ohms

Output
4 to 20mA in 2-wire technology

ORDERING DATA

TT -   (   ) - R -100 /   (   )

BB = bare PC board   Range
ST = snap track   Stock values -50+50C / 0+35C / 0+50C / 0+100C
DR = din rail
e.g.   TT-ST-R-100/0+35C   Temperature transmitter mounted on snap track with 0 +35C temperature range
or   TT-P-4-R-100/-50+50C 4" pipe RTD sensor with -50+50C temperature transmitter built-in

COMPONENTS

ENERCORP instruments ltd

030725