KTD-267

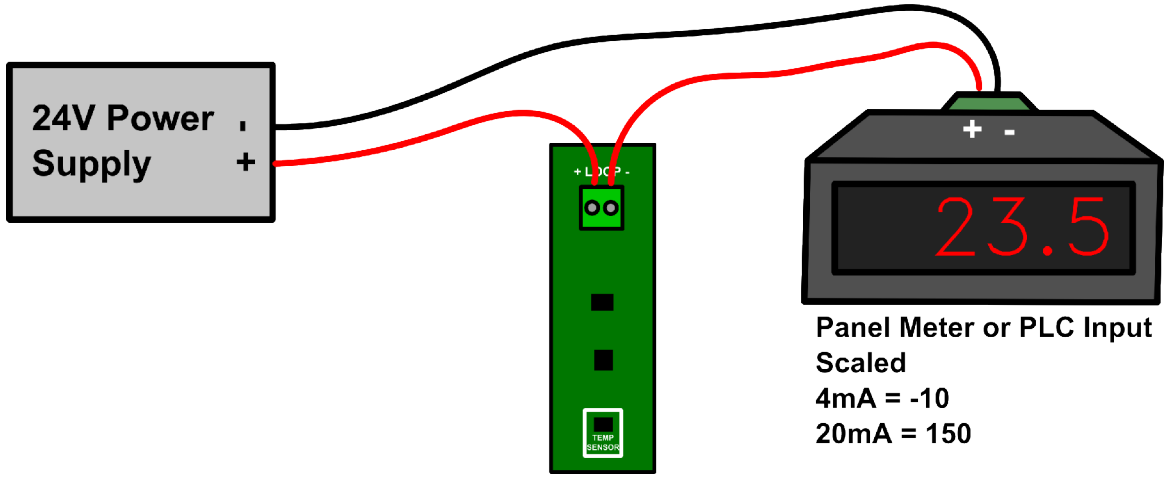
- Loop Powered
- 4-20mA output
- -10°C to 125°C Measurement Range
- Typical Accuracy of +/- 0.5°C
- Worst case Accuracy of +/- 2°C at 25°C
- Worst case Accuracy of +/- 3°C at 125°C
- DIN Rail Mounting Option
- Ideal for measuring cabinet temperature for RTUs and PLCs
- Up to 40V Loop Voltage
- 8.1V Compliance Voltage
- 72 x 20 mm

This is a simple 4-20mA output loop powered temperature sensor with measurement range from -10°C to +125°C designed for monitoring RTU and PLC cabinet temperatures.

Scaling:
Though the sensor measures from -10°C to +125°C the 4-20mA output is linear and scaled from -10°C at 4mA and +150°C at 20mA, this means the maximum output current will be 17.5mA at +125°C.

Sensor Current (mA)	Percentage of 4-20mA signal	Equivalent Temperature (°C)
4	0%	-10
8	25%	30
12	50%	70
16	75%	110
20	100%	150

Wiring:
The sensor has only two terminal connections, labelled "*Loop+*" , the more positive connection to the current loop and "*Loop-*", the more negative connection to the current loop.



Connecting KTA-267 to Panel Meter or PLC Input

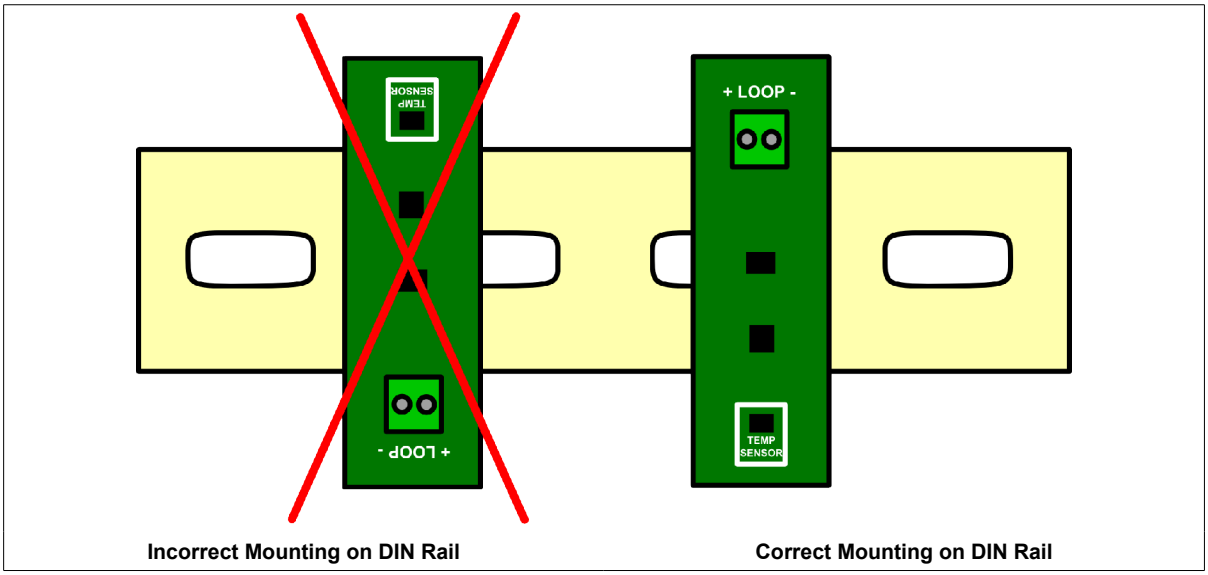
Power Supply Considerations:
The minimum power supply voltage for the current loop depends on the burden voltage of each of the items in the loop.
The KTA-267 and KTD-267 each have a burden voltage of 8.1V on the current loop.
To determine the maximum load that the device can drive with the available power supply use the following formula.

$$Max\ Load\,(ohm) = \frac{Vpowersupply - Vburden}{0.02}$$

To determine the minimum power supply voltage for a given load use the following formula.

$$Vpowersupply = [\,Load\,(ohm) \times 0.02\,] + Vburden$$

Mounting Notes:
To reduce the effect of heating from the component labelled Q1, the board should be mounted either horizontally with components on top or vertically on DIN rail with the terminal block at the top and component labelled “Temp Sensor” at the bottom.



Incorrect Mounting on DIN Rail **Correct Mounting on DIN Rail**

Ordering Options:

KTD-267

A: Screw Hole Mounting
D: DIN Rail Mounting