The Model 577506 RTD Temperature Transmitter is designed for close-coupled, integrally mounted applications. Using microcontroller based circuitry, the 577506 senses resistance changes as a function of temperature and provides an extremely stable and accurate 4 to 20MADC loop output. Field range-ability and user selectable features allow a single device to satisfy virtually all temperature applications. Re-calibration or programming is done in seconds using standard hand tools. No soldering or component changes are necessary. The transmitter is housed in a gasketed, explosion-proof enclosure, CSA and UL approved for Class I, Groups C & D, Class II, Groups E, F, & G, and Class III locations.

**TECHNICAL SPECIFICATIONS**

**INPUT**
- 100 ohm platinum RTD
- alpha = .00385
- 2 or 3 wire

**RANGE**
- -300 to 1300 F (-190 to 700 C)
- degrees C/F switch selectable

**RTD SENSOR CURRENT**
- 400 micro amps

**SPAN**
- switch selectable
- 30 degrees F minimum
- 1200 degrees F maximum
- (20 degrees C minimum)
- (700 degrees C maximum)

**ZERO SUPPRESSION**
- switch selectable
- -300 to 970 degrees F
- (-190 to 720 degrees C)

**SPAN AND ZERO ADJUSTMENT**
- Output adjustment
  +/-. 5%

**ACCURACY**
- 0.05% of span at 75 deg. F (typical)
  (Linearity, Repeatability, Hysteresis)

**AMBIENT EFFECT**
- 0.002% of span / degree F (typical)

**OUTPUT**
- 4 to 20 MADC into 600 ohms @ 24 VDC
  (Output adjustment)
- 12 to 36 VDC

**COMPENSATED TEMPERATURE RANGE**
- -40 to 158 degrees F

**OPERATING TEMPERATURE RANGE**
- -40 to 158 degrees F

**UPDATE TIME**
- 20 readings / second

**RESPONSE TIME**
- 3.2 Seconds (input to output max)

**UP/DOWN SCALE BREAK**
- Switch selectable

**ENCLOSURE**
- Explosion Proof/Gasketed
  Class I, Groups C&D
- Class II, Groups EF&G, Class III
- Copper Free Aluminum (K-27)
- Blue Polane Finish

**WIRING CONNECTIONS**
- Screw Terminal

**ELECTRONIC ASSEMBLY**
- Printed Circuit Board
- FR-4 Fiberglass Laminate, Epoxy Solder Mask
- Dow-Corning Conformal Dip Coated

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