

# SYSTEMATIC CONTROLS CORP.

3105 CARTER CIRCLE P.O. BOX 1928  
KENNESAW, GA 30144  
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## *Instruction manual*

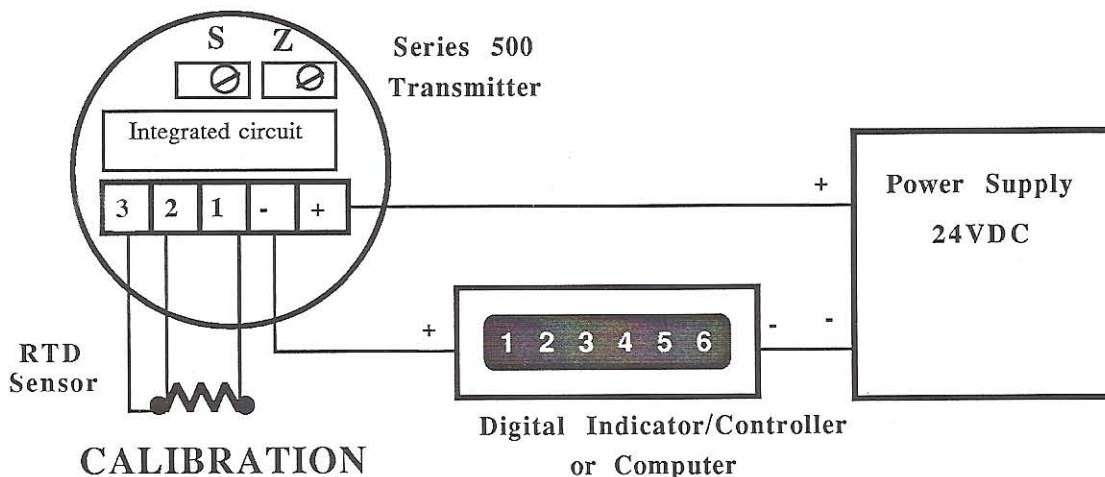
### SERIES 500 TEMP. TRANSMITTER 2-WIRE RTD INPUT

#### SPECIFICATIONS

RTD Input: 3-wire, Platinum (Pt) 100 ohms, DIN standard  
ASTM and DIN calibration: 100 ohms @ 0 deg.C  
( Alpha = 0.00385/ohm/ohm/DegC)

OUTPUT: 4-20mA  
MINIMUM SPAN: 50 deg.F  
MAXIMUM SPAN: 1200 deg.F  
POWER SUPPLY: 24VDC  
MAX. LOAD RESISTANCE: 650 Ohms  
CALIBRATION ACCURACY: 0.4% FSD  
OPERATING TEMP.: -25 to 75 deg.C

#### WIRING DIAGRAM



#### CALIBRATION

Zero and span adjustments are available by the potentiometers mounted on the circuit board, and marked Z for Zero, and S for Span. Connect the series 500 printed board to a 24VDC power supply a precision current meter(Multimeter). Connect a precision decade resistance box, or a pot with a known value to the input terminals. Always use 3-wire connections to compensate for the resistance of the wires.(refer to diagram above). Set the input device to the lower range and adjust the ZERO Pot on the card for 4mA output. Change the input to the full scale value, and adjust the SPAN Pot for 20mA Output. You may need to repeat this procedure because of a possible small interacting between the Zero and the Span pots.